

# THE CHILDREN'S HOSPITAL MEDICAL CENTER

## 1962 Annual Report



## THE 1962 ANNUAL REPORT

### THE CHILDREN'S HOSPITAL MEDICAL CENTER

*comprising:*

Association of the House of the Good Samaritan

Sarah Fuller Foundation for Little Deaf Children

The Sharon Sanatorium

The Hospital and Convalescent Home for Children

*and affiliates:*

Children's Cancer Research Foundation, Inc.

Judge Baker Guidance Center

The Children's Mission to Children

300 LONGWOOD AVENUE, BOSTON 15

By 1968, C. H. M. C. will resemble this architect's layout, with new buildings in the main cluster devoted to clinics, clinical research, and general services. Parking facility and housing center on Brookline Avenue (upper right) have first priority.

## OFFICERS, BOARD OF TRUSTEES, 1963

William W. Wolbach  
PRESIDENT

G. Peabody Gardner  
VICE PRESIDENT

Alexander Wheeler  
VICE PRESIDENT

F. Murray Forbes, Jr.  
TREASURER

Arnold W. Hunnewell  
SECRETARY AND ASSISTANT TREASURER

Mrs. David Wilder  
CHAIRMAN, WOMEN'S COMMITTEE

Nelson S. Bartlett, Jr.  
ASSISTANT TREASURER

OF THE CHILDREN'S MEDICAL CENTER



## THE CHILDREN'S HOSPITAL MEDICAL CENTER

### Chiefs of Staff, 1963

Charles Barlow, M.D.  
NEUROLOGIST-IN-CHIEF

Sidney Farber, M.D.  
PATHOLOGIST-IN-CHIEF

George E. Gardner, M.D.  
PSYCHIATRIST-IN-CHIEF

William T. Green, M.D.  
ORTHOPEDIC SURGEON-IN-CHIEF

Robert E. Gross, M.D.  
SURGEON-IN-CHIEF

Charles A. Janeway, M.D.  
PHYSICIAN-IN-CHIEF

Donald D. Matson, M.D.  
ACTING NEUROSURGEON-IN-CHIEF

Edward B. D. Neuhauser, M.D.  
RADIOLOGIST-IN-CHIEF

GENERAL DIRECTOR  
Leonard W. Cronkhite, Jr., M.D.

ASSISTANT TO THE  
GENERAL DIRECTOR  
Lendon Snedeker, M.D.

DIRECTOR OF NURSING  
Muriel B. Vesey, R.N.

DIRECTOR OF FISCAL AFFAIRS  
AND CONTROLLER  
Richard E. Held, C.P.A.

DIRECTOR OF PERSONNEL  
Alexander T. Brown

DIRECTOR OF GENERAL SERVICES  
Rudman J. Ham

DIRECTOR OF PUBLIC RELATIONS  
William J. Brennan

### Administrative Staff, 1963

FUND DIRECTOR  
Mrs. Anthony T. Michaels

ADMINISTRATIVE ASSISTANT  
TO THE GENERAL DIRECTOR  
John A. Lombardo

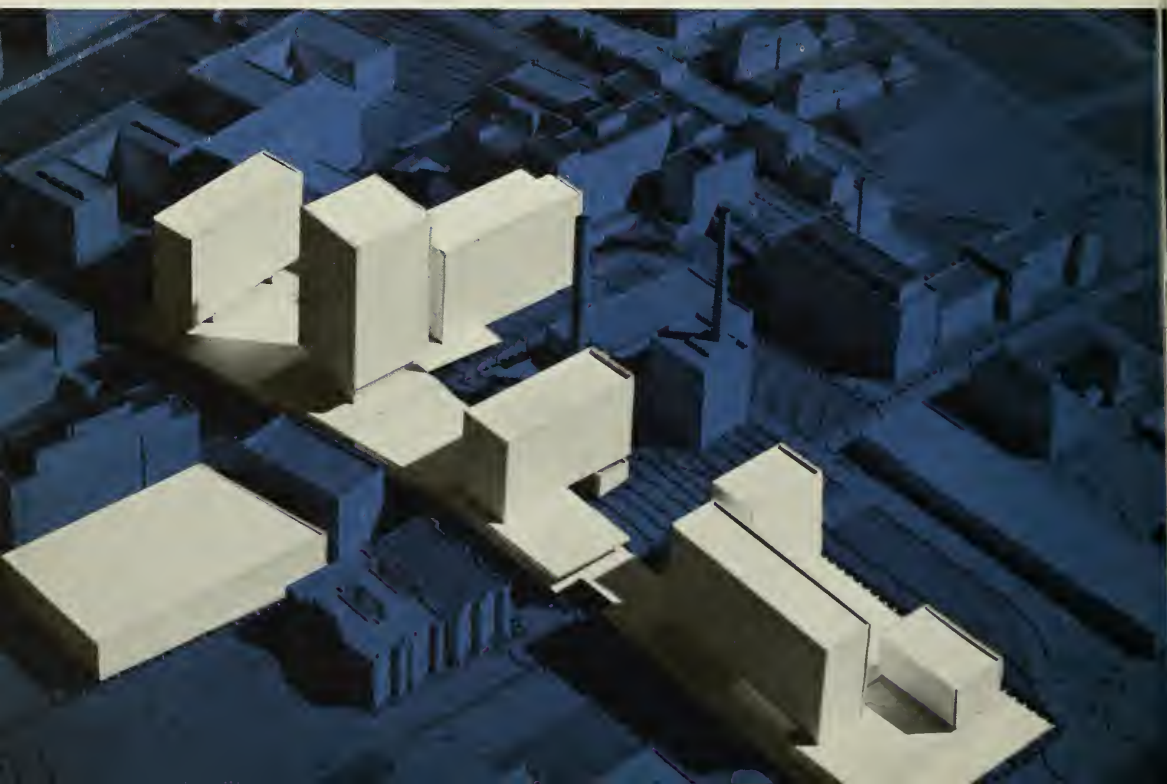
ADMINISTRATIVE ASSISTANT  
TO THE GENERAL DIRECTOR  
Richard Bertocchi

ASSISTANT SECRETARY OF THE BOARD  
Miss Antoinette J. Valenza

COUNSEL  
William N. Swift

AUDITORS  
Arthur Andersen & Co.

By 1975, C. H. M. C. will stretch from Brookline Avenue to Harvard Medical School. New buildings will house activities formerly carried out in Building A and in former apartment buildings along Longwood Avenue. This is Children's proposed "new face to the pediatric world of the future."





# THE CHILDREN'S HOSPITAL MEDICAL CENTER

## ADMINISTRATIVE STAFF, 1963, continued

### Faculty, School of Nursing

ASSOCIATE DIRECTOR

Miss Ethel Trafton

CHAIRMAN, CHILDREN'S HOSPITAL PROGRAM

Miss Olive Simard

CHAIRMAN, AFFILIATE PROGRAM

Miss Rita Bryant

### Nursing Service Staff

ASSOCIATE DIRECTOR

Mrs. Phyllis G. Downing

ASSISTANT DIRECTORS

Miss M. Aldra Dickie, Evening

Miss Lorene Dresser, Day

Miss Dorothy Pratt, Out-Patient

Miss Lydia Smith, Night

SUPERVISORS AND INSTRUCTORS

Miss Brooks Barnes, Medical

Miss Edith Bell, Central Services

Mrs. Grace Bennett, Supplies and Equipment

Mrs. Janice Christensen, Evenings

Miss Marilyn Coco, Operating Rooms

Miss Jeanne Colt, Surgical

Miss Margaret Francis, Good Samaritan and  
Respirator Unit

Miss Joan Gassman, Orthopedic

Mrs. Lois Morgan, Acting Director, Education

Mrs. Caroline Overfors, Private

Mrs. Marion Stewart, Instructor

### Heads of Administrative Services

OFFICE MANAGER, ACCOUNTING DEPARTMENT

Mrs. Laura Bocon

SENIOR RECEPTIONIST

Mrs. Grace Bradley

SUPERVISOR, PRINT SHOP

Salvatore Caliguri

DIRECTOR, PHYSICAL THERAPY DEPARTMENT

Miss Shirley Cogland

SUPERVISOR, MAIL ROOM

Theodore Cranton

SECRETARY, WOMEN'S COMMITTEE

Mrs. José R. Cruz

CHIEF TELEPHONE OPERATOR

Miss Josephine Daley

PURCHASING AGENT

Miss Elizabeth Fitzgerald

DIRECTOR, HEALTH EDUCATION

Mrs. Harriet H. Gibney

DIRECTOR, DIETARY DEPARTMENT

Miss Maxine Gilson

MANAGER, SURGICAL APPLIANCE SHOP

John Glancy

DIRECTOR, VISUAL EDUCATION DEPARTMENT

F. R. Harding

DIRECTOR, VOLUNTEER SERVICE

Mrs. Kathleen Higgins

ASSISTANT CONTROLLER

Benjamin Jurcik, C.P.A.

MANAGER, HOUSEKEEPING

Lawrence Levinson

DIRECTOR, MEDICAL RECORDS DEPARTMENT

Mrs. Corinne Norton

DIRECTOR, EMPLOYEE HEALTH SERVICE

Miss Hester E. Macuen, R.N.

DIRECTOR, SOCIAL SERVICE

Miss Elizabeth Maginnis

MANAGER, DATA PROCESSING

Webster McKnight

MANAGER, METHODS AND FORMS CONTROL

Miss Margaret Meenan

MANAGER, SPECIAL SERVICES

George T. Nicoll

COORDINATOR, DEPARTMENT OF  
PATIENT EDUCATION AND RECREATION

Mrs. Barbara Patterson

PLANT SUPERINTENDENT

George Stilgoe

ENGINEER FOR PLANNING AND CONSTRUCTION

Arthur Stromberg

CHIEF PHARMACIST

Arthur M. Thompson

## THE PRESIDENT'S REPORT

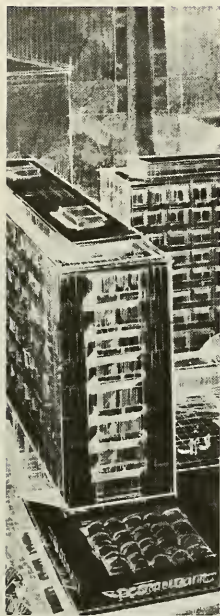
All great institutions go through periods during which critical examination of objectives and methods of achieving them is essential to continued progress and good health. The past year has been such a period in the administration of The Children's Hospital Medical Center. In 1962, the Board of Trustees, Administration, and Staff took a series of decisive steps to put our vast house in order for an intensified program of growth and development of our services to children. The steps, fruitful in their promise of future progress, were in reality the beginning of a planning and expansion program to be climaxed with the celebration of our One-Hundredth Anniversary in 1969. We have the first statement of this program in the General Director's Report on pages 9 to 16.

While we have continued to take great pride in the quality and professional leadership in the principal functions of the Medical Center—patient care, teaching, and research—there has been growing concern over the declining use of certain of our facilities, resulting, among other things, in the substantial and mounting deficits. Thus the question has arisen as to whether the Medical Center as a total concept was keeping abreast of the needs of the community and of accelerating changes in medicine in general. This last statement should in no way be construed as reflecting upon our Staff. They simply cannot be expected to have the time, on top of their already rigorous schedules, to do the planning, developing, coordinating, and expediting of the plans and policies necessary to keep the Medical Center, as a total enterprise, in the vanguard of progress.

The problem essentially has been one of leadership—and leadership is an extraordinarily difficult commodity to provide for hospitals and particularly teaching hospitals.

To begin with, the organizational structure of voluntary hospitals is peculiarly complex and, to my way of thinking, thoroughly unsatisfactory from the standpoint of clear-cut responsibility and control. Traditionally and properly the Trustees are charged with the final responsibility; and in some cases—particularly in smaller community hospitals which cannot afford more than a one- or two-man administrative staff—Trustees become actively involved in many phases of management. As the group responsible for patient care, the professional Staff is given full authority over all medical matters, and this is also as it should be. However, the dividing line as to where medical responsibility leaves off and that of the administrator begins can be blurred almost to the point of invisibility, leaving the latter in the position of business administrator, housekeeper, general-purpose prat-boy and fall-guy and without sufficient authority to carry out adequately even this dubious collection of duties. How forward planning and executive leadership can flourish in an organizational environment such as this is an excellent question—it is certainly doing it the hard way! Small wonder that the average term of office of a hospital administrator is scarcely longer than the comparable expectancy of a major league baseball manager.

It is the writer's strong feeling that this traditional "troika" system of organization control of hospitals is inadequate for a major teaching and research center such as ours. To begin with, the complexity and subtleties are so overwhelming as to provide the supreme test for the ables of executives even though he be provided with virtually dictatorial authority. Furthermore, in addition to the Trustees, here is an incomplete list of those with whom the General Director of the Medical Center must work—usually as THE HOSPITAL, but other times as



the official representative of the Trustees:

- the Medical Staff, including the senior staff with tenure
- our own assistant administrators
- non-medical employees
- the Dean of the Harvard Medical School
- administrators of other hospitals
- patients and their relatives
- various branches and instruments of Federal, State, and  
Municipal governments
- medical and other scientific foundations
- architects and contractors
- the press and public

It seems almost axiomatic that no Director, however capable, can operate effectively in an atmosphere such as this unless he is recognized as a professional equal by the senior staff and is given authority and backing by the Trustees comparable to those of the chief executive officer in a business enterprise.

Until now this has not been the case. Whereas the Hospital has been characterized by preeminently strong professional leadership in its several major Services, it has not emphasized strong administration. Decentralization of authority has ensured a maximum of individual creative freedom for the Staff, but has not developed a total organizational structure which can be quickly responsive to social and economic change and to today's rapid technological advances in the biological sciences.

With this general background, it can be stated that the most important forward step taken in 1962 was the selection of the new General Director. The appointment of Dr. Leonard W. Cronkhite, Jr., has given to the Trustees and Staff a thoroughly revitalizing experience, bringing as he did outstanding abilities and the background of a rich and varied career. Furthermore, Dr. Cronkhite is operating under a broad delegation of authority from the Trustees which can be summarized as follows:

- to serve as the chief executive officer of The Children's Hospital Medical Center.
- to provide leadership in the conception, development, and execution of its objectives, policies, plans, and programs
- to direct its total professional and business affairs

In scarcely over a year, Dr. Cronkhite has given the Medical Center an almost incredible amount of forward momentum on many fronts. In keeping with the highest traditions of administrative leadership, he has achieved this by hard work, clear thinking, reliance on competent advice, and the persuasiveness of irrefutable logic. He commands the full backing of the Board of Trustees and has earned the respect and cooperation of the Staff.

As the preceding paragraphs must undoubtedly suggest, I believe that the problems and complexities of the modern teaching hospital require a different organizational concept than has traditionally prevailed. This new concept presumes, above all else, a chief executive officer of superior capabilities and provided with adequate scope and authority to carry out the awesome responsibilities entrusted to him.

The Medical Center has adopted this as a plan of basic policy and is confident that it represents a significant turning point in its development.

WILLIAM W. WOLBACH, *President*

## TREASURER'S REPORT

In 1962, although revenue from services to patients increased 11 per cent over the previous year, the continuing higher cost of providing such services resulted in the highest deficit in the history of the Hospital: \$869,000 before depreciation, compared to \$645,000 in 1961. As shown in the comparative statement of income, the net loss after depreciation was \$1,308,000 in 1962 and \$1,078,000 in 1961.

The increase of \$223,000 in the deficit is accounted for by these changes:

Increase in net operating expenses		\$730,000
Increase in patient allowances and adjustments		<u>152,000</u>
Less: Increase in patient revenue	\$580,000	\$882,000
Increase in other revenue	<u>79,000</u>	<u>659,000</u>
Increase in loss, before depreciation		<u><u>\$223,000</u></u>

The increase in patient revenue reflects greater utilization of the Hospital—patient occupancy of the 350 bed capacity was 73 per cent in 1962 compared to 69 per cent in 1961 (complete patient statistics for both years are shown on page 8). Revenue from day rate services increased \$320,000 due to higher occupancy and to the increase in the board rate of \$2.00 per day, effective May 1, 1962. Ancillary and clinic revenue increased \$260,000. A substantial portion of the latter is due to revisions in the ancillary rate structure, in line with other institutions, initiated in the fourth quarter of the year. These are the major revenue changes recommended in the Controller's divisional cost report of 1961, and it is estimated that, based on 1962 occupancy and utilization, the special service revenue in 1963 will be increased by \$200,000.

Since in both 1962 and 1961, net operating expenses exceeded patient revenue by 20 per cent, the additional revenue from the above sources merely defrayed the current increases in salary and expenses. Therefore, in 1963, major efforts will be directed toward raising occupancy in order to substantially reduce the deficit. This is essential because it is obvious that deficits of the magnitude of those incurred in the last two years deplete legacy and endowment funds contributed to provide for free patient care.

F. MURRAY FORBES, JR., *Treasurer*



# THE CHILDREN'S HOSPITAL MEDICAL CENTER

## *Comparative Statement of Income for the Years Ended September 30, 1962 and 1961*

	1962	1961
During the year we earned from:		
Day-rate services to inpatients . . . . .	\$2,750,508	\$2,429,211
Special (ancillary) services to:		
Inpatients . . . . .	\$1,762,694	\$1,540,239
Outpatients . . . . .	560,741	519,766
Other organizations . . . . .	100,179	130,980
Outpatient clinic fees . . . . .	446,964	420,800
Total patient revenue . . . . .	\$5,621,086	\$5,040,996
Because of contractual arrangements and patients' inability to pay, we issued:		
Rate adjustments to Blue Cross . . . . .	\$159,284	\$132,772
Rate adjustments to welfare agencies . . . . .	213,678	179,643
Allowances to patients . . . . .	393,477	333,787
Account write-offs, net . . . . .	157,240	125,026
Net patient revenue . . . . .	\$4,697,407	\$4,269,768
We spent or incurred for:		
Patient care—salaries . . . . .	\$ 4,583,887	\$ 4,143,695
Patient care—expenses . . . . .	2,780,745	2,391,286
Research and education—salaries and expenses . . . . .	\$ 1,973,092	\$ 1,793,462
Supported by grant income of . . . . .	\$(1,973,092)	\$(1,733,462)
Less revenue received for:		
General services, dietary, School of Nursing, etc. . . . .	\$443,218	\$395,259
Overhead from grants . . . . .	156,330	104,430
Net operating expenses . . . . .	\$6,765,084	\$6,035,292
Since patient revenue did not equal expense, the operating LOSS was . . . . .	\$2,067,677	\$1,765,524
This operating loss was partially defrayed by income from:		
United Community Services . . . . .	\$ 41,309	\$ 34,064
Permanent Charity Fund . . . . .	31,000	25,560
Investments and trust funds . . . . .	833,630	798,658
Allotments from affiliates . . . . .	188,121	164,808
Patient care funds . . . . .	104,575	96,840
Total other income . . . . .	1,198,635	1,119,930
Net LOSS before depreciation . . . . .	\$ 869,042	\$ 645,594
Depreciation:		
Building . . . . .	\$292,965	\$293,389
Equipment . . . . .	146,464	139,079
Net LOSS for fiscal year charged to General Fund . . . . .	\$1,308,471	\$1,078,062

This statement of income has been condensed from the annual report of our auditors, Arthur Andersen & Co.

# THE CHILDREN'S HOSPITAL MEDICAL CENTER

*Patient Statistics—Comparative Fiscal Years 1962 and 1961*

INPATIENT	Admissions		Patient Days		Average Length of Hospitalization (Number of Days)		Per Cent of Beds Occupied	
	1962	1961	1962	1961	1962	1961	1962	1961
Short-term divisions (300 beds)	9,451	8,848	80,305	76,690	7.5	7.7	73.3	70.0
Long-term divisions (50 beds)	<u>172</u>	<u>150</u>	<u>12,535</u>	<u>11,639</u>	37.3	38.4	68.6	63.8
Total Hospital (350 beds)	<u>9,623</u>	<u>8,998</u>	<u>92,840</u>	<u>88,329</u>	<u>9.6</u>	<u>9.8</u>	<u>72.7</u>	<u>69.1</u>

OUTPATIENT	1962	1961
Clinic visits	113,104	104,412
SPECIAL SERVICES	1962	1961
Laboratory tests	156,100	140,950
X-rays	86,400	81,378
Operations	5,513	5,374
Electrocardiology treatments	3,526	4,006
X-ray therapy treatments	3,049	2,728
Physical therapy treatments	28,997	26,804

## GENERAL DIRECTOR'S REPORT

In 1969 The Children's Hospital will celebrate its One-Hundredth Anniversary. It is desirable that we have something to celebrate; ideally, a program born out of solution of present problems and plans for the future, as well as out of a distinguished past. Today's problems require precise definition in order to provide for rational formulation of plans for the future. Our attention this year has been focused on the several broad areas of professional, administrative, and social concern which, when compounded, form the heart of the present dilemma.

The phenomenon of upward spiralling costs is, of course, not peculiar to The Children's Hospital. As reported by the American Hospital Association, the cost of operating all American hospitals rose nearly one billion dollars, or about ten per cent, from 1960 to 1961. The upward trend having been consistent for several years, we may assume a similar future increase.

The Children's Hospital traditionally has operated at some deficit. Indeed, there are those who hold that it is only right and proper for a charitable institution to do so. In a way, the Hospital has known where the money was coming from, inasmuch as it has been the beneficiary of a Boston philanthropy which few other communities could equal. The support given the C. H. M. C. by its Trustees, Corporation Members, and friends has been magnificent. The Hospital likewise has benefited from wise investment counsel, so that its endowment fund and income have continued to appreciate in value, although operating deficits have been made up out of capital funds as necessary. Conceding that some operating loss is inevitable as long as we provide free care for those children whose parents cannot afford to pay (an essential altruism to which our Staff and Trustees have always agreed), it is nonetheless apparent that since 1960 the deficit has reached runaway proportions.

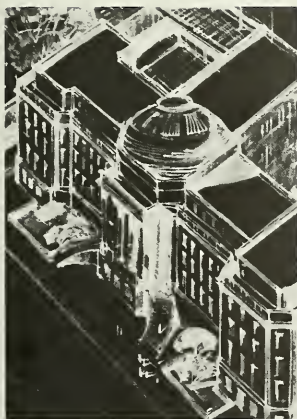
There is no reason for believing that private philanthropy will continue undiminished in the form of the past. There are cogent reasons for believing that this form of philanthropy, stemming out of large personal fortunes, will diminish under the dissecting knife of taxation. Thus, the solution to today's financial dilemma is not the wistful hope for another increment of public generosity on a continuing basis. It must come from a very much more candid appraisal of the fundamental problems which beset all hospitals.

### Management

The usual approach to the costs-versus-revenue line is the employment of various managerial techniques borrowed from industry and other health agencies. While we do not minimize the value of these purely administrative devices, the possibilities of making ends meet by pursuit of a variety of small gains in a plant employing 1,400 persons, occupying twenty-two buildings, and covering 467,000 square feet of space have a limited range. This approach, however vigorously pursued, cannot by itself solve our basic operational and economic problem.

### Utilization

Not too many years ago the Hospital was plagued by the chronic problem of an insufficient bed complement to handle the demands made upon it for care. But, during the past few years, the problem has been over-resolved to the extent that the lower rate of utilization of the vast facilities of the Hospital has seriously affected its fiscal health. Two aspects of this phenomenon might have been anticipated. On the one hand, a well-documented and gratifying shift from hospitalization to ambulatory care has occurred in the management of the sick child. This in itself provides the Staff with a happy reflection of its many



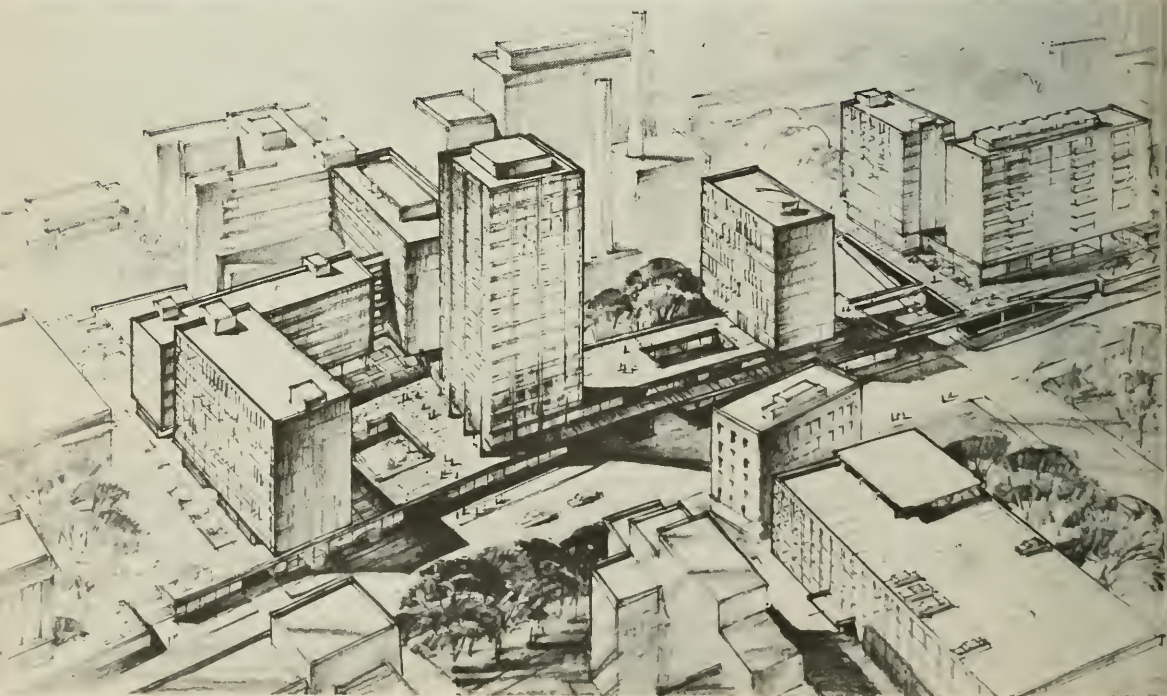
efforts to solve the biological riddle of illness. On the other hand, the same forces have combined to shorten the hospital stay of each patient, which again provides another measure of the very real progress in medical care which has taken place in the last decade.

This triad of low utilization, increase in ambulatory care, and shorter hospital stay might lead one erroneously to the conclusion that the many services provided by the Hospital in the past are no longer needed in the same quantity as before. Indeed, a prudent manager, unwilling to carry the analysis any further, would be forced to conclude that the Hospital should contract rather than expand its operations. Here, however, a paradox is introduced which effectively negates such a simple conclusion.

While our over-all rate of utilization remains low, some departments face the enormous task of catching up on huge waiting lists of patients needing highly specialized care. Others, even as this report is being written, are successfully translating basic research into techniques which promise cure or relief for the sick child. In short order such translations create a whole new set of clinical demands on the Hospital which somehow must be met within the framework of its operational capacities. It is clearly evident, then, that problems in child health present patterns of change which resist compression into the rigid professional, administrative, or even architectural forms of past years. The Hospital must maintain a position of enlightened flexibility which will allow it to adjust to the products of its own scientific endeavors and to those of other medical centers. It must recognize and acknowledge the change in locus of the many kinds of medical procedures: from university hospital, to community hospital, to physician's office, and to the home. And finally, it cannot fail to be responsive to the very same scientific and social changes which it is dedicated to produce.

If an institution can wisely review its patterns of patient care, its professional and administrative organization, and its physical facilities,

Second Major Development Phase calls for replacement of present Longwood Avenue buildings with complex architecturally harmonious and continuous with earlier phase construction.





it will meet the needs of the community it serves, however defined. Full utilization of services then becomes a prized by-product to the solution of much more fundamental issues.

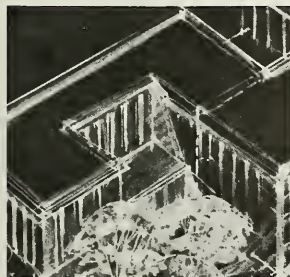
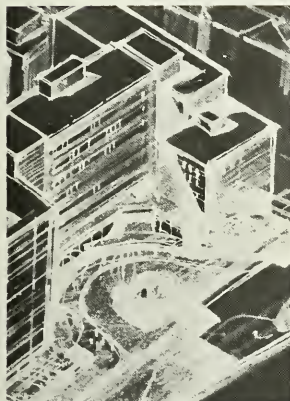
During 1962 the Trustees, medical Staff, and administrative staff have attempted to come to grips with these basic issues and to develop their clear definition. Today we begin to see some solutions — jointly conceived, acceptable to most, and exciting in prospect.

## Facilities

The most charitable thing that can be said about hospital buildings is that they are reflections of both the social and medical mores of the year in which they were designed, as well as of the financial expediences of the time. It is not surprising that we are heirs to an extraordinary heterogeneity of architectural form, size, shape, function, and character. Some of these buildings impress one by their beauty of style and execution, others by their functional utility, and still others by their total inadequacy as parts of a modern hospital.

One further concern relating to the Hospital's economic problems is the possession of structures designed for the practice of medicine as conceived in another era. In some instances it is virtually impossible to provide a high level of patient care without incurring a substantial operating loss. The very fact that C. H. M. C. owns twenty-two structures poses an economic problem in itself. It is thus expected that any design for the future must include the consolidation and redesign of several existing structures, as well as new considerations for new purposes.

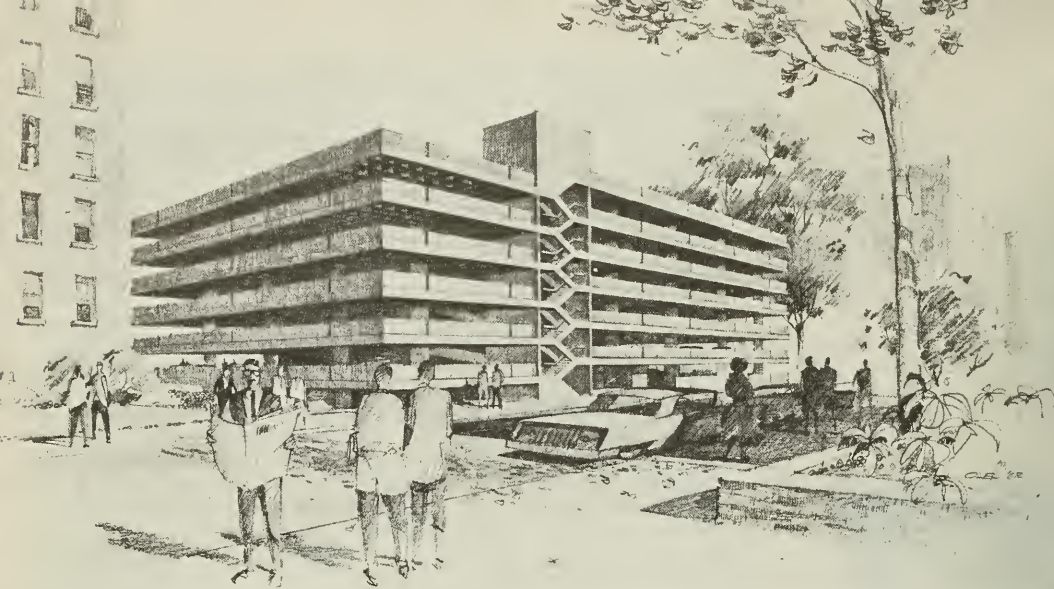
The broad relationships of management, utilization, and physical plant, with all their ramifications, leave no desirable alternatives to the solution of specific problems other than judicious expansion. The decision has been reached, in principle, that the only realistic solution to the financial dilemma is at once the most imaginative and daring one. Although we are faced with the problem of expanding and therefore increasing, temporarily, the operating costs of an enterprise already operating at a loss, the conclusion to which we have come in the last six months is that we must plunge ahead in a major development program which will tax the resources of the Hospital and the community to the utmost.



## The One-Hundredth Anniversary Development Program

The above proposal to solve the nagging financial problems of the C. H. M. C. through further growth and development is timely. In 1969, The Children's Hospital, incorporated on March 22, 1869, will celebrate its One-Hundredth Anniversary. The approach of a centennial celebration places time on our side in the solution of our utilization and revenue problems, inasmuch as it provides a natural focus of inspiration, stimulation, and impetus. On the other hand, if we do not move ahead in 1963 on a major first phase program that can be achieved by 1969, we may lose an opportunity that will not repeat itself for another hundred years, and, of equal importance, an opportunity which, if passed by, will jeopardize all other long-range plans.

The first phase of the One-Hundredth Anniversary Development Program concerns itself with short-term needs. The second phase involves a longer range of planning and development. Each is described briefly in the sections to follow and illustrated in the accompanying architect's drawings. In actual fact, the two major phases that we contemplate must be preceded by a staging phase, which we will first describe.



### Staging Phase

The planned construction to be carried out as part of the One-Hundredth Anniversary Development Program is much like a gigantic chess game. A series of preliminary moves, on the surface unexciting but of pivotal importance, makes possible the next and final phases. Fortunately, these early moves can proceed at once, since they represent activities which are financially self-sustaining and do not require the use of endowment or building funds.

Like many public institutions, The Children's Hospital Medical Center has been so warmly embraced by the automobile that there is virtually no space on which development can take place. A recent report on the city of Boston states that sixty per cent of Boston's land has been ceded to the automobile. We do not differ substantially from the city as a whole in that thirty-four per cent of our own land is devoted to parking. On this page an architect's drawing of a parking facility illustrates the first new structure. This will consolidate all of the Hospital's parking facilities and make available other properties for new Hospital construction.

Hospital housing presents specific problems which relate directly to the activities and concerns of those to be housed. For the benefit of the patient population, Residents and Interns are required to live on the Hospital grounds. Freely translated, this usually means acquisition by the Hospital of a nearby tenement house or placement of double bunks in an unused attic room. There are still a few doctors who, having gone through this themselves, endow living of this kind with a virtue of its own. We submit that this is a residual anachronism not properly a part of the young physician's educational process. Second, several hundred post-doctoral Fellows and visitors come to the Hospital each year. They arrive for varying lengths of time, speak a multitude of tongues, and are derived from all the racial and ethnic groups of the world. They immediately come into conflict with the hard realities of local real estate practices and the social vagaries of a community not yet ready to receive them in these numbers. A third group includes the graduate nurse desirous of spending a few years in a great medical center. She often has the edge of her enthusiasm blunted when it becomes apparent that she cannot live both economically and proximal to her place of employ-

First step in entire program is construction of parking facility, convenient to C. H. M. C., and permitting use of present parking area for construction of housing center.



ment. Last, the parents of our patients arriving from many cities and towns with concern for their child uppermost in their minds derive some degree of comfort from staying near the Hospital.

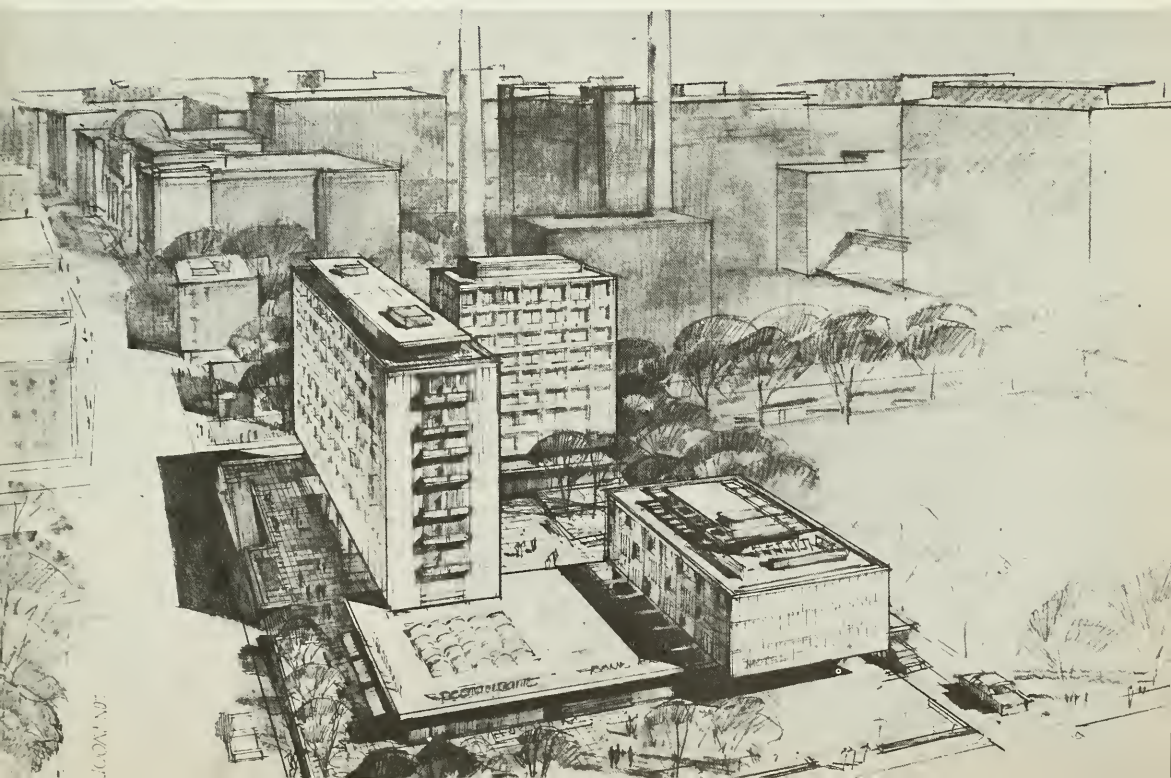
We propose to combine all of these housing functions into a single housing complex, shown on this page. One tower will contain apartments of varying size for the graduate nurses and other professional employees. A second will house the resident and post-doctoral Fellows in quarters ranging from the single room for the unmarried to three- and four-room apartments for those whose families choose to live on the grounds. The lower structure pictured is the motel for parents and for some patients not yet well enough to return to their homes but not so sick as to require intensive hospital care. We feel the complex need not be spartan and have added, hopefully, the convenience of bank, post office, eating facility, and parking, plus space for a day-nursery. This latter will allow the Hospital to add to its rolls many young mothers whose specific talents we would put to use. Construction of this complex of buildings should begin in late 1963 or early 1964 and will complete the staging phase of the development program.

Housing center for Residents, Interns, Fellows, and graduate nurses will occupy former parking lot at Longwood and Brookline Avenues. A motel for patients and parents, as well as limited commercial activities, also are planned.

### **First Major Development Phase**

*Clinic, Clinical Research, and General Services Buildings.*

The last major building project at The Children's Hospital Medical Center was the modern, 300-bed, in-patient facility completed in 1956.



It was at first called Building B, but in 1961 was dedicated as the Farley Building, in honor of the late John Wells Farley, who had been President and Chairman of the Board of Trustees and the moving spirit both in the building campaign and in the concept of a constellation of institutions grouped in a medical center around The Children's Hospital.

In the planning of the Farley Building, certain features were finally eliminated to keep construction within the limits of funds available. Thus, even as the new hospital building went into service, it was recognized that, while it should provide a general sufficiency of bed space for a long time to come, certain needs had not been met. These were substantially of four kinds:

**Modern, Centralized Out-Patient Clinics.** The present Out-Patient Department on the ground and first floors on the Blackfan Street side of Building A at 300 Longwood Avenue is crowded and obsolete. As the medical care of children has shifted during the last decade more and more away from hospitalization and toward home care buttressed by clinic visits as needed, the out-patient service of the Hospital — particularly the emergency clinic — has sharply increased while the in-patient service has shown a much slower growth and some fluctuation. It is difficult, if not impossible, to provide attractive, efficient, and economical out-patient service in the present facilities. Little can be provided for the comfort and convenience of the patients and their parents.

**Clinical Research Laboratories.** The Children's Hospital Medical Center has flourished as a teaching and research institution and undoubtedly owes its greatness to the fact that its Staff is drawn from the Harvard Medical Faculty, that these men have been free to develop and pursue their ideas and interests as they relate to the child, that the Chiefs of Staff are pioneers in originating and applying pediatric knowledge and techniques, and that they have attracted hundreds of promising young men to train under them. Our research story was the theme of the 1961 Director's Report, by Mr. Williams, and I will not attempt here to recapitulate it further.

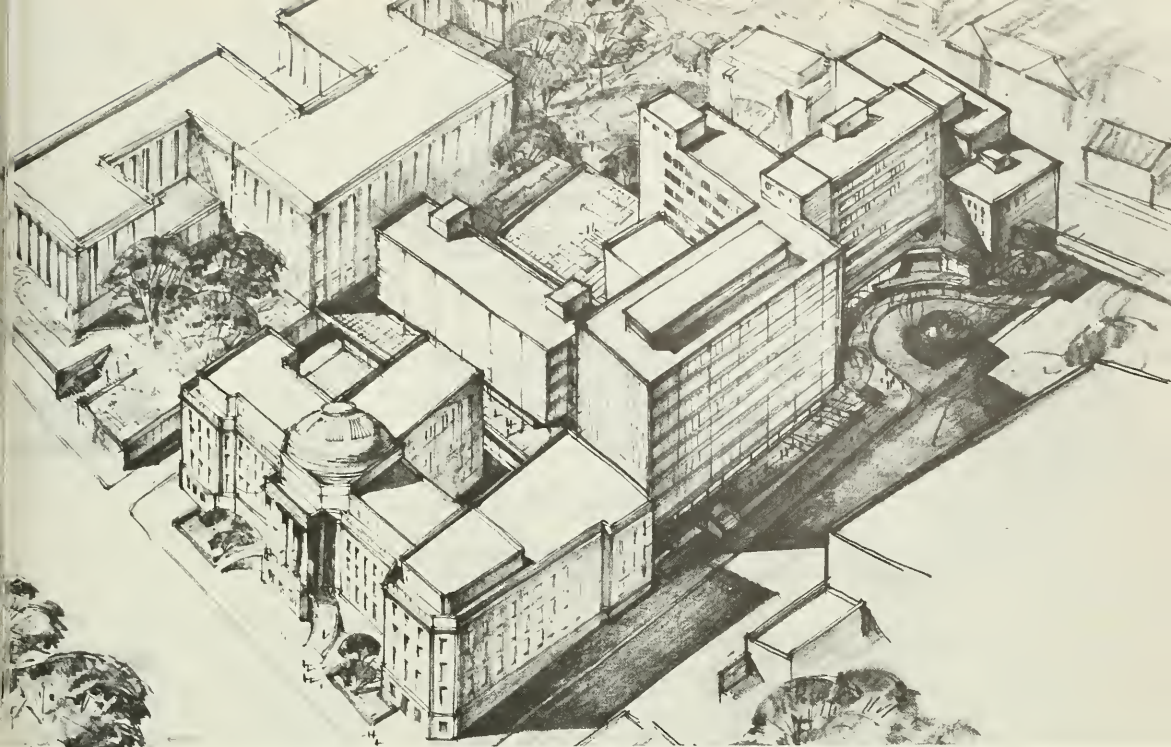
For some time, our Staff's research aspirations and the natural growth and development of the C. H. M. C. research program, totalling something in the neighborhood of \$3,000,000 in annual grant support, have been hampered by lack of laboratory space. Opportunities for large Federal grants have hinged on the provision of adequate physical facilities, and in some cases have been lost through lack of the required space for research. We have the continuing obligation to provide modern, flexible, well-equipped laboratory facilities for those members of the Staff whose past contributions toward pediatric research have meant so much to the sick child.

**General Services.** The administrative functions of The Children's Hospital Medical Center to a great extent have been tucked in here and there about the plant, insofar as department heads could obtain attention to their needs and compete for odd lots of space against our first order of business, which is professional services for patients. In the name of both efficiency and economy, the Administration recognizes a great need for consolidation coupled with expansion in this area, which is concerned with the nursing, social service, housekeeping, maintenance, accounting, record-keeping, and other administrative functions of a large hospital. It is logical that necessary development of such supporting facilities be combined with more dramatic and appealing needs in an over-all building program.

**New In-Patient Services.** New Divisions and Departments within the Hospital structure are created in response to demonstrated community needs. For a number of years the Hospital has been unable to continue its orderly development in these areas for lack of appropriate bed facilities. Some examples of our present thinking include: A psychi-







Clinic and Clinical Research Building complex, in the space between Building A and the Farley Building, will provide much-needed facilities for out-patient clinics, clinical research laboratories, new in-patient services, etc. It is part of the First Major Development Phase.

atric unit — there are almost no suitable in-patient facilities in the New England area where the acutely disturbed young child may receive proper psychiatric treatment in an atmosphere designed to meet the needs of a young child. We propose, therefore, to develop a psychiatric in-patient service to back up our constantly enlarging and excellent out-patient activities in psychiatry. The Department of Ophthalmology has for many years been without space for a clinic, adequate operating room, and a bed facility. The new building will include an entire floor devoted to modern operative and treatment facilities for the Departments of both Otolaryngology and Ophthalmology. Exploratory discussions with the Staff are now being carried out to determine the wisdom of establishing in-patient services in the clinical fields of rehabilitation, adolescent medicine, and dermatology.

As the bricks-and-mortar materialization of the first major phase of our One-Hundredth Anniversary Development Program, *we propose the construction of a modern building containing some 260,000 square feet of gross floor space to house out-patient clinics, clinical research laboratories, and general services plus certain additional in-patient units and diagnostic services.*

This new building would consist, in architectural terminology, of a three-story "pad" (sub-basement, basement, and ground floor) and two towers, as shown in the architect's drawing on this page. One tower, rising eight stories above the base building, would center on the patient facilities. The second tower, rising six stories, would be devoted to clinical research laboratories.

For some time, the site of a proposed Clinic and Clinical Research Building has remained in question, pending consideration of the "Harvard Complex" proposal to integrate six teaching hospitals associated with Harvard Medical School on a new hospital site on or adjacent to the property of the Peter Bent Brigham Hospital. The question was to what extent The Children's Hospital might combine physical facilities with the other hospitals. In 1962, the Trustees endorsed the formation of a Harvard Hospital Center with The Children's Hospital Medical Center as a cooperating member, and declared that the C. H. M. C. would "continue to function separately but be closely related and increasingly affiliated with the new Hospital Center in future years."

In view of this action and the earlier site recommendation of the Staff Executive Committee, together with further administrative consideration of the functions and logistics of a new building, a final decision on site was reached. The new building will be placed in the unoccupied space between the Farley Building and Building A, requiring demolition only of two small, obsolete buildings.

The building will cost \$8,000,000 to \$9,000,000, on the basis of preliminary estimates.

The Trustees have authorized the Administration to proceed with final plans, with the expectation that groundbreaking will begin in the fall of 1963.

## Second Major Development Phase

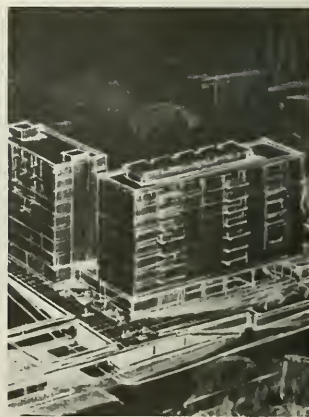
Completion of the first major development phase, the building program just described, would have 1968 as its target date. As shown in the architect's drawing on page 10, the second major development phase, beginning in 1969, would primarily involve the demolition of Building A and the old buildings on Longwood Avenue between Blackfan and Binney Streets and their replacement with a new arrangement of pad and towers extending from the edge of the Medical School's Longwood Quadrangle group of buildings to Binney Street (and, of course, architecturally continuous with the design of the Housing Center between Brookline Avenue and Binney Street).

In this final phase, The Children's Hospital Medical Center would present a new and entirely modern face to its second century and the pediatric world of the future. In all probability, this second phase would cost an additional \$10,000,000 to \$12,000,000.

## Conclusion

Our concentration on problems and how they may be solved, on weaknesses and how they may be strengthened, may seem to diminish or to overlook the many parts of the total organization in which Trustees, Staff, and Administration take great pride. In almost every respect the C. H. M. C. of today has exceeded the expectations of its founders. On the wards, the child from Roxbury shares both his doctors and his toys with his counterpart from Istanbul or Santiago. Each year the Hospital graduates scores of superbly trained physicians, nurses, and technicians, each to take his place in the Center's far-flung community. And from the crowded laboratories comes an endless series of small and large observations which promise hope for a better understanding of the afflictions of childhood. This diverse activity provides some substantive evidence of continued youth in an otherwise venerable institution.

Leonard W. Cronkhite, Jr., M.D.  
*General Director*



## SOURCE OF CHILDREN'S HOSPITAL PATIENTS BY PLACE OF RESIDENCE

*For the Year Ending September 30, 1962*

## MASSACHUSETTS:

19,176



Boston

7,363

## ELSEWHERE IN MASSACHUSETTS:

11,813



Barnstable County	115	Hampshire County	121
Berkshire County	111	Middlesex County	4,910
Bristol County	598	Nantucket County	18
Dukes County	4	Norfolk County	2,118
Essex County	1,251	Plymouth County	667
Franklin County	50	Suffolk County	656
Hampden County	635	Worcester County	559

## ELSEWHERE IN THE UNITED STATES:

1,830



Alabama	6	Montana	3
Alaska	2	Nebraska	1
Arizona	2	Nevada	1
Arkansas	2	New Hampshire	344
California	14	New Jersey	55
Connecticut	292	New Mexico	5
Delaware	2	New York	176
District of Columbia	3	North Carolina	8
Florida	42	Ohio	19
Georgia	9	Oklahoma	3
Illinois	14	Pennsylvania	25
Indiana	6	Puerto Rico	4
Iowa	1	Rhode Island	346
Kansas	10	South Carolina	9
Kentucky	5	Tennessee	2
Louisiana	2	Texas	3
Maine	289	Vermont	76
Maryland	7	Virginia	5
Michigan	7	Washington	5
Minnesota	4	West Virginia	6
Missouri	7	Wisconsin	8

## ELSEWHERE IN THE WORLD:

107



Africa	1	Europe	9
Asia	3	Mexico	9
Canada	36	South America	40
Central America	7	West Indies	2

GRAND TOTAL

21,113

## CHANGES

Dr. Adam J. Sortini, Director of Hearing and Speech Clinic for five years, left The Children's Hospital Medical Center for Children's Hospital in Halifax in July. He is succeeded by Dr. Allan C. Goodman.

Mrs. Marie Smith, R.R.L., Director of the Medical Records Department since 1954, resigned on July 1, 1962, to go to the General Hospital in Greenwich, Connecticut. She is temporarily replaced by Miss Betsey Loveland.

Mr. George Stilgoe became Plant Superintendent on July 23, 1962, replacing Mr. Arthur Stomberg, who is now Engineer for Planning and Construction.

Miss Dorothy Rutherford, Executive Secretary of the Women's Committee for seven years, retired on August 17, 1962, and was replaced by Mrs. Olga Tingus.

Mrs. Martha Stuart, who first came to The Children's Hospital Medical Center in 1925, retired on October 1, 1962, as Director of the Dietary Department, and was succeeded by Miss Maxine Gilson.

Mr. John A. Lombardo became Administrative Assistant to the General Director on December 17.

Mr. Greer Williams, Director of Development since 1960, left The Children's Hospital Medical Center on December 31, 1962 to join the Rockefeller Foundation as Consultant on Publications.



## In Memoriam

Miss Theresa A. Hurley, Associate Director of the School of Nursing and President of the Nursing Alumnae Association, died on January 19, 1962. She was a graduate of our School of Nursing and a member of our Staff since 1935.

Mr. Edward Murphy, a Member of The Children's Hospital Medical Center Corporation for many years whose family has graciously taken over his worthy efforts as a fund-raiser, died on February 4, 1962.

Colonel Archibald William Smith, former Director of Resources, founder, then Executive Vice President and Trustee of Hospitals Laundry Association, Inc., and, upon his retirement, Chairman of the Board of the Laundry, died on February 27, 1962.

Mr. Daniel J. McDevitt, a Corporation Member and generous supporter of Dr. Janeway's Kidney Fund, died on June 22, 1962.

Dr. Meier G. Karp, Consultant in Orthopedic Surgery and member of the Orthopedic Surgery staff since 1937, died on September 13, 1962.

Dr. L. Lahut Uzman, our first Neurologist-in-Chief and Bronson Crothers Professor of Neurology at Harvard Medical School, died on November 7, 1962.

Dr. Conrad Wesselhoeft, Consultant in Infectious Diseases, Emeritus, died on December 1, 1962.

Mr. Arthur G. Rotch, President of the Infants' Hospital for twenty-five years and one of our Trustees for sixteen years, died on December 9, 1962.

Dr. Maurice N. Kay, Associate in Medicine, died on December 22, 1962.

## REPORT OF WOMEN'S COMMITTEE, 1962

For nearly 100 years The Children's Hospital Medical Center has been taking care of sick children. This purpose—spelled out in the original charter—has not changed. Granted, our Hospital started at another location, under the slightly different name of The Children's Hospital. The site has been moved. Buildings have been remodeled, some torn down and replaced by new ones. Services from outlying districts have been consolidated. New drugs, new medical and surgical techniques have drastically changed patient treatment. But we are still caring for sick children. It would seem that this past year has been one of constant re-appraisal and readjustment to the responsibilities and needs of our particular Hospital. We must continue to make these changes to give the best care. We must also do this with warmth and understanding for our young patients and their parents. Through suggestions offered by our new Director, Dr. Leonard W. Cronkhite, Jr., the Women's Committee has re-evaluated many of our services to The Children's Hospital Medical Center. I think you will find that almost every committee has made some sort of change in its methods of operation.

Perhaps the most tangible of our readjustments has been the reorganization of our financial structure—facilitated by the patient guidance of Mr. Richard E. Held, the Controller. Fundraising is not our primary purpose. But to give good service to our Hospital, we must have a sound and up-to-date financial foundation. The closing date for the annual accounting has been advanced so that we may submit an accurate summary on a strictly cash basis. This naturally reduced our votable money for the year. Also, the closing of the Lunch Shop for alterations to the whole Hospital cafeteria area emphatically cut profits. The Gift Shop suffered too. The mess and noise have not been conducive to relaxed shopping. Outside difficulties eliminated the South Shore Music Circus Benefit this summer. So a collective decrease of about \$7,000 explains this dreary financial deficiency. Reorganization may often be temporarily expensive,

## WOMEN'S COMMITTEE OF THE CHILDREN'S HOSPITAL MEDICAL CENTER

### Executive Committee, 1962-1963

#### OFFICERS:

Mrs. David Wilder  
CHAIRMAN

Mrs. Albert Pratt  
Mrs. Kenneth W. Warren  
VICE-CHAIRMEN

Mrs. Richard C. Knight  
RECORDING SECRETARY

Mrs. Randolph K. Byers  
CORRESPONDING SECRETARY

Mrs. T. C. Haffenreffer, Jr.  
TREASURER

#### MEMBERS:

Mrs. Weston W. Adams  
Mrs. Charles F. Batchelder  
Mrs. Howard F. Gillette  
Mrs. Hans J. Kroto  
Mrs. Stephen Little  
Mrs. Oldfield B. Rapalyea  
Mrs. Philip C. Thibodeau  
Mrs. Jacob Wallace  
Mrs. Frederick R. Weed

Mrs. Charles F. Hovey  
PAST CHAIRMAN

Mrs. Robert B. Almy  
VOLUNTEER SERVICE

Mrs. Robert H. Hopkins  
NOMINATING COMMITTEE

but it ultimately paves the way for greater profit. The Yankee Bookstall and the Thrift Shop have raised \$3,000 more—\$1,500 each. Also, we are deeply grateful to the outside activities of the Cataumet Hospital Week (which actually lasted two months), the Daffodil Fair and the Dedham Skating Party for their generous contributions.

The special events have been varied and interesting. On November 28, 1961 at our Friends and Volunteers Meeting in the Jimmy Fund Building, Dr. J. Roswell Gallagher spoke about teen-age medical care. An absorbing movie in color supplemented his talk. Tea followed at Gardner House. On February 26, 1962, Dr. Charles A. Janeway was host to Dr. Andrea Prader from Zurich, Switzerland. We sponsored this tea at the Medical Study Library. On March 13th, we welcomed the Executive Committee of the New England Peabody Home for Crippled Children at a tea at Gardner House. Subsequently, this group was invited to join our Committee. The Employees Service Award Ceremony on May 9th recognized the years of dedicated service of employees with special awards. The tea was provided by the collective efforts of Mrs. Martha Stuart of the cafeteria, Seilers, and the Women's Committee.

Our annual Volunteer evening took place on May 15th. An increase of attendance necessitated the use of the Jimmy Fund Building. After the presentation of pins and certificates for hours and years of devoted volunteer service, Dr. William F. Bernhard talked about the new techniques in heart surgery and showed a fascinating film in color to illustrate his subject. On September 23rd, I had the honor once again of attending the Nurses' Graduation, a very inspiring occasion. Our Committee supplied the flowers.

Within the Hospital we continued our services of weekly coffee hours for parents and monthly teas for nurses. We donated tickets, through a special fund, to Symphony, Pops, hockey, baseball, and theatrical events to the House Staff and student nurses, who were most appreciative. Our annual Christmas Tea for doctors and nurses with Ruby Newman's festive music becomes an increasingly popular affair—with

enthusiastic carol singing and dancing. The Staff Wives group, which is closely associated with our Committee, has been particularly active, providing many services and social occasions for incoming and outgoing Staff members.

Outside the Hospital we attended with regularity the various hospital association meetings, ending the season with the American Hospital Association Convention in Chicago.

At our monthly meetings, excellent speakers have kept us up-to-date on activities in various Hospital areas. Colored slides, movies, and tours supplemented the talks. Of special interest was the arrival of our new Director, Dr. Leonard W. Cronkhite, Jr., who outlined at our May meeting his immediate and future plans for the Hospital.

## REPORT OF THE SUBCOMMITTEES

*Christmas Window Painting*—Chairman, Mrs. George H. Sweetman. The suggestions of a young and appreciative audience add the freshness to the annual efforts of this talented committee which covers the windows with their charming Christmas decor.

*Decoration Committee* — Chairman, Mrs. Kirke A. Neal. This busy group, working with the Hospital, redecorated the Psychiatric and Speech Clinics, Division 35, and the Kopic Library. Dr. Green's teaching room received new chairs. The Volunteer area has been completely renovated with new paint and handsome new furniture. Mrs. Neal's expert advice will soon be displayed in the attractive new Doctors' Dining Room, Lounge, and our elegantly remodelled Lunch Shop.

*Gift Shop*—Chairman, Mrs. H. Raymond Wilkinson. The advanced closing date of the annual accounts and the extensive alterations of the Lunch Shop affected the profits of the Gift Shop. However, we are grateful for the gift of \$2,000 and the enthusiastic support of the volunteers on this committee, who anticipate a much larger gift next year.

*Girl Scouts Committee* — Chairman, Mrs. George A. Clapp. Sick and frequently lonely children are comforted by the cuddly animals, scrapbooks, and other toys made by the Girl Scouts. Old Christmas cards, empty spools, and

salt boxes are welcomed materials for Mrs. Clapp's industrious group.

*Holiday Committee* — Chairman, Mrs. Stephen Little. Nine holidays have been more festive for our sick children through the efforts of the Needham, Wellesley, and Dover Girl Scouts and the Boston and Weston Junior Red Cross, who provided tray favors (which they made) and hoodsies.

*Hospitality Coffees* — Chairman, Mrs. Sidney H. Wirt. The weekly coffees on Wednesday afternoons have become an established custom. The attendance increases every year. From October through May, 624 parents from twenty-two States and seven foreign countries expressed the appreciation of the efforts of this busy committee, which is assisted by the ever-helpful Lunch Shop.

*Hospitality for Foreign Nurses*—Chairman, Mrs. Sherman R. Thayer. Again Mrs. Thayer has been welcoming the foreign nurses during the past year. She urges Women's Committee members to invite these nurses to their homes, particularly during the Thanksgiving and Christmas holidays.

*Knitting Committee*—Chairman, Mrs. Francis A. Harding. Three loyal church groups and fifteen devoted individual knitters supplied the Hospital with 152 articles — sweaters, bonnets, mittens, caps, socks, booties, afghans, as well as stuffed dolls and toys.

*Library Committee* — Chairman, Mrs. Kenneth W. Warren. The conscientious workers of the Patients' Library and the House of the Good Samaritan Library have circulated 5,579 books. They have acquired 321 new books. A record number of State Reading Certificates were awarded. Five-book certificates went to thirty-three children. Twenty-book certificates went to three children. Two cartons of books were dispatched to the Ranfurly Out-Islands Library in the Bahamas, thanks to the Yankee Bookstall. Of special note are several charming sketches, a gift of Mrs. Barbara Cooney Porter, who gave a "chalk talk" to delighted young patients in the House of the Good Samaritan.

*Lunch Shop*—Chairman, Mrs. Samuel S. Stevens. In spite of being closed for three months for complete renovation, the Lunch Shop donated the handsome



gift of \$7,000. With a dashing new look it will re-open soon and continue to provide the Hospital with an essential service.

*Membership Committee* — Chairman, Mrs. George P. Buell. In the absence of Mrs. Buell, Mrs. Robert H. Hopkins reported a total membership of 576, of which 149 are Active and 199 are Associate, 89 Contributing and 139 Sustaining. Hospital tours and informal talks outlined the activities of the Women's Committee and the Volunteer Service.

*Nurses' Teas* — Chairman, Mrs. Edgar A. Bering, Jr. Informal monthly teas and the annual Christmas Party continue to brighten the busy schedule of student and staff nurses, who greatly appreciate the efforts of this active committee.

*Photography*—Chairman, Mrs. Albert A. Hittel. The smiling faces of sick children have given far-away parents and grandparents reassurance and pleasure. Thank-you letters in many languages are indicative of the value of this Polaroid service.

*Picture Committee* — Chairman, Mrs. Charles F. Hovey. Many colorful prints and paintings, donated to the Women's Committee, were framed and hung in various clinic areas in the Hospital, adding a cheery note to waiting and examining rooms.

*Publicity*—Chairman, Mrs. Robert M. P. Kennard. Throughout the year metropolitan and local newspapers reported and photographed our special activities, through the articulate efforts of Mrs. Kennard.

*Staff Wives Committee* — Chairman, Mrs. Charles A. Janeway. Hospitality for House Staff and Fellows and their families is the major responsibility of this busy group. A supper dance, a tea, two picnics, housing assistance, and a furniture exchange were among its activities this past year.

*Surgical Dressings* — Chairman, Mrs. Joel M. Barnes. Every Tuesday, winter and summer, this loyal committee produced a yearly total of 99,353 dressings. The outside assistance of the circles of the First Baptist Church in Newton, a Scituate group, and the Temple Israel Sisterhood made 102,316 dressings—giving the Hospital a grand total of 201,669.

*Thrift Shop*—Chairman, Mrs. John M. Alden. The constant appeal for donations and conscientious efforts of this committee produced the largest profit of \$3,783.30 for our Hospital in ten years. A new and improved location at 656 Center Street, Jamaica Plain, should add to our Thrift Shop receipts—but only if supported by nice donations from the Women's Committee.

*Volunteer Service Committee*—Chairman, Mrs. Robert B. Almy. This group functions as a liaison between volunteer and professional services. Any joint activities or problems are discussed and acted upon.

*Yankee Bookstall* — Chairman, Mrs. Frederick R. Weed. We are proud of the Yankee Bookstall gift to The Children's Hospital Medical Center Building Fund. A particularly successful sale contributed a gratifying sum of \$6,214.30—nearly \$1,500 more than last year.

With deep regret we note the retirement of Miss Dorothy Rutherford, who has been our devoted Executive Secretary and a dear friend for seven years. At the October 1962 meeting, we expressed our sincere appreciation with the presentation of an engraved Paul Revere pitcher. Mrs. Olga Tingus is our new Secretary, with whom we enthusiastically anticipate the coming years.

My heartfelt thanks to each Chairman and Committee member who conscientiously gave so much of herself and her valuable time. I am certain we will continue to serve our Children's Hospital Medical Center with the same purpose of dedication and understanding—but also with a new and adaptable approach.

Respectfully submitted,

MRS. DAVID WILDER

*Chairman, Women's Committee*

## Women's Committee Financial Summary, 1962

Cash on Deposit, September 30, 1961	\$15,609.20	
Transactions (Per Summary of Cash		
Reports for Fiscal Year Ending		
September 30, 1962):		
Add: Receipts	<u>33,920.44</u>	
	\$49,529.64	
Less: Disbursements	<u>32,044.95</u>	
Cash on Deposit, September 30, 1962		\$17,484.69
Less: Cash Balance required for monthly expenses		<u>2,000.00</u>
Available funds voted for 1962-1963		\$15,484.69

## Distribution of Votable Funds, 1962-1963

Yankee Bookstall proceeds to Building Fund		\$ 6,214.30
<i>Committee Operation Expense Items:</i>		
Teas and Entertainment	\$ 1,700.00	
Staff Wives	1,000.00	
Holiday Committee	100.00	
Knitting Committee	100.00	
Library Committee	250.00	
Camera Fund	100.00	
Picture Fund	25.00	
Flower Fund	450.00	
Hospital Service Awards Ceremony	125.00	
Discretionary	<u>250.00</u>	
		\$ 4,100.00
<i>Contribution Items:</i>		
Entertainment Tickets for Nurses	\$ 375.00	
Scholarship for Nurses	500.00	
Social Service	170.00	
Dr. Gardner	100.00	
Bowling Prize	25.00	
Department of Education and Recreation	<u>4,000.00</u>	
		\$ 5,170.00
Total Voted:		\$15,484.30

November 13, 1962

## BOARD OF TRUSTEES

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Charles F. Adams  
 Mrs. Robert B. Almy  
 Kent Andrews  
 Julian D. Anthony  
 Neil R. Ayer  
 Sherwin C. Badger  
 Mrs. Nelson S. Bartlett  
 Nelson S. Bartlett  
 Mrs. Charles F. Batchelder, Jr.  
 Matthew Berman  
 Philip G. Bronstein  
 John G. Brooks  
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 J. Marshall Duane  
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 Lawrence H. Hansel  
 Bartlett Harwood  
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 Paul F. Hellmuth  
 Bruce D. Henderson  
 Harvey P. Hood  
 Mrs. Robert H. Hopkins  
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 Parkman D. Howe  
 Weston Howland, Jr.  
 Arnold W. Hunnewell  
 Kenneth L. Isaacs  
 Reginald Jenney  
 Edward C. Johnson, II  
 Milton Kahn  
 John F. Kennedy  
*President of the United States*  
 Richard C. Knight

Frank L. Kozol  
 Benjamin Kulp  
 Henry A. Laughlin  
 Arthur L. Lewis  
 Robert J. Livermore  
 Arthur H. Lockwood  
 John W. Lowe  
 William D. Manice, Jr.  
 Austin B. Mason  
 David A. Mittell  
 Edward R. Mitton  
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 George S. Mumford  
 Mrs. Kirke A. Neal  
 Harold L. Niles  
 Robert C. Nordblom  
 Adrian O'Keeffe  
 Thomas A. Pappas  
 Miss Amelia Peabody  
 Mrs. James H. Perkins  
 Edgar A. Perry  
 Mrs. Roger A. Perry  
 Mrs. Lewis I. Prouty  
 Norman S. Rabb  
 Miss Margaret A. Revere  
 Walter J. Ripley, Jr.  
 Edward Rose  
 Thorvald S. Ross  
 Serge Semenenko  
 George Sherman  
 Samuel Sidd  
 William A. Silverman  
 Samuel L. Slosberg  
 Mrs. Charles E. Spencer, Jr.  
 George A. Stockemer  
 William N. Swift  
 Mrs. Howard M. Turner  
 James S. Turner  
 Howland S. Warren  
 Mrs. Alexander Wheeler  
 Alexander Wheeler  
 Mrs. Henry Wheeler, Jr.  
 Henry K. White  
 Alexander Whiteside  
 Mrs. David Wilder  
 Ben Ames Williams  
 Mrs. Raymond Wing  
 William W. Wolbach



## CORPORATION MEMBERS

---

- Gordon Abbott  
 L. Clayton Anderson  
 Mrs. W. Benjamin Bacon  
 Sherwood E. Bain  
 Francis T. Baldwin  
 Mrs. William DeFord Beal  
 Richard A. Berenson  
 David S. Bond  
 George W. W. Brewster  
 F. Gorham Brigham, Jr.  
 Dr. Alexander Brin  
 Francis H. Brooks  
 Mrs. Paul Brooks  
 William L. Brown  
 Raymond J. Callahan  
 Ephron Catlin, Jr.  
 Mrs. Eugene H. Clapp, II  
 Joseph A. Clapp, Jr.  
 Miss Louise Coburn  
 Hon. Richard Comerford  
 Mrs. T. Jefferson Coolidge  
 W. Edgar Crosby, Jr.  
 Nelson J. Darling  
 Charles Devens  
 Willard Blake Dik  
 Richard G. Dorr  
 Albert P. Everts, Jr.  
 Mrs. William S. Febiger  
 Miss Adelaide Fitzgerald  
 James F. Fitzgerald  
 Mrs. Carlyle G. Flake  
 John G. Flint  
 Alexander C. Forbes  
 Mrs. F. Murray Forbes, Jr.  
 A. Oram Fulton, Jr.  
 Mrs. John L. Gardner  
 John W. Goodrich  
 Roland Gray, Jr.  
 H. Frederick Hagemann, Jr.  
 John M. Hall  
 Mrs. Nathaniel Hamlen  
 Mrs. Lawrence H. Hansel  
 Francis A. Harding  
 Francis W. Hatch, Jr.  
 Mrs. Frederick D. Hawkins  
 Christian A. Herter, Jr.  
 Amor Hollingsworth, Jr.  
 Mrs. Edward B. Hopkins  
 Chandler Hovey  
 Charles F. Hovey  
 Henry S. Howe  
 Mrs. Parkman D. Howe  
 James F. Hunnewell  
 Charles Jackson  
 Mrs. James Jackson, Jr.  
 James Jackson, Jr.  
 Marcien Jenckes  
 Mrs. John C. Kiley, Jr.  
 John C. Kiley, Jr.  
 Frederick M. Kimball  
 John S. King  
 John M. Kirk  
 Harry J. Klotz  
 C. Haven Ladd  
 Mrs. Thomas H. Lanman  
 Mrs. John E. Lawrence  
 Henry M. Leen  
 Paul Lerman  
 George M. Lovejoy, Jr.  
 Merritt B. Low, M.D.  
 Stephen C. Luce, Jr.  
 Daniel J. Lyne, Jr.  
 C. Clark Macomber  
 Robert T. Markson  
 Mrs. Julian A. Marzynski  
 Mrs. Robert C. Merriam  
 Mrs. Harry S. Middendorf  
 James J. Minor  
 Harold A. Mock  
 John A. Moir  
 Burt F. Moody  
 Hon. Francis X. Morrissey  
 Major Nicholas P. Morrissey  
 Frederick S. Moseley, III  
 William G. Nickerson  
 Charles B. Newhall  
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Edith M. Taylor, M.D.

### NEOPLASTIC DISEASES

Grantley W. Taylor, M.D.

### MEDICINE

George W. Thorn, M.D.

### SURGERY

Carl W. Walter, M.D.

### PATHOLOGY

Shields Warren, M.D.

### PHYSICS IN RADIOLOGY

Edward W. Webster, Ph.D.

### INFECTIOUS DISEASES

Louis Weinstein, M.D.

### STOMATOLOGY

David Weisberger, M.D.

### PARASITIC AND VIRAL DISEASES

Thomas H. Weller, M.D.

### PHYSIOLOGY

James L. Whittenberger, M.D.

### NEUROPATHOLOGY

Paul Yakovlev, M.D.

### MEDICINE

Paul M. Zoll, M.D.

## EMERITI

### ORTHOPEDIC SURGEON, EMERITUS

Albert H. Brewster, M.D.

### CONSULTANT IN MEDICINE, EMERITUS

C. Sidney Burwell, M.D.

### CONSULTANT IN MEDICINE, EMERITUS

Allan M. Butler, M.D.

### CONSULTANT IN DERMATOLOGY, EMERITUS

Austin W. Cheever, M.D.

### CONSULTANT IN NEUROLOGY, EMERITUS

Stanley Cobb, M.D.

### SENIOR ASSOCIATE IN MEDICINE, EMERITUS

John A. V. Davies, M.D.

### CONSULTANT IN CHILD HEALTH, EMERITUS

Martha M. Eliot, M.D.

### SENIOR ASSOCIATE IN MEDICINE, EMERITUS

Henry Gallup, M.D.

### PHYSICIAN, EMERITUS AND ALLERGIST, EMERITUS

Lewis W. Hill, M.D.

### PHYSICIAN, EMERITUS

Eliot Hubbard, Jr., M.D.

### SURGEON-IN-CHIEF, EMERITUS

William E. Ladd, M.D.

### CONSULTANT IN SURGERY, EMERITUS

Charles G. Mixer, M.D.

### ORTHOPEDIC SURGEON, EMERITUS

Robert H. Morris, M.D.

### CONSULTANT IN SURGERY, EMERITUS

Francis C. Newton, M.D.

### ORTHOPEDIC SURGEON, EMERITUS

James W. Sever, M.D.

### ASSOCIATE IN MEDICINE, EMERITUS

David W. Sherwood

### PHYSICIAN-IN-CHIEF, EMERITUS

Richard M. Smith, M.D.

### CONSULTANT IN CHILD HEALTH, EMERITUS

Harold C. Stuart, M.D.

### PHYSICIAN, EMERITUS

Edwin T. Wyman, M.D.



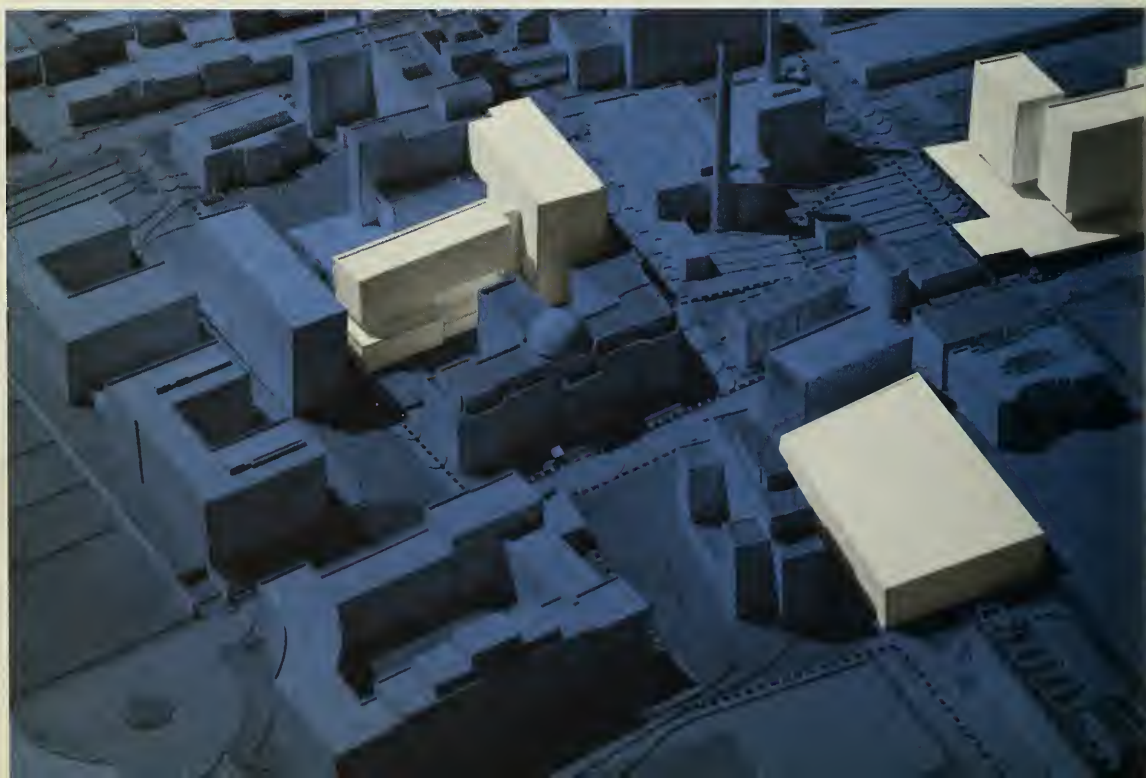
# THE CHILDREN'S HOSPITAL MEDICAL CENTER FORM OF BEQUEST

I give, devise, and bequeath to The Children's Hospital Medical Center, in the City of Boston, and Commonwealth of Massachusetts, the sum of .....

Architect's model of C. H. M. C. as it is today graphically shows how reassignment of land use will enable building program to be accomplished.



First phase of building program — construction of garage, housing center, and clinic and clinical research complex — is illustrated by architect's model. Photo on back cover shows model of how C. H. M. C. will appear when entire building program is completed.



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## REPORT OF PHYSICIAN-IN-CHIEF

This report provides a special opportunity for stock-taking, since the appointment of Dr. Cronkhite as General Director has given this Institution the administrative strength its growth requires. Consequently, we are on the threshold of a new era in which it will be possible to implement the plans that the Staff has been making for a number of years. Moreover, since this report marks the half-way mark in my own projected term as Physician-in-Chief, it is a good time to look back in order to try to plan wisely for the future.

### Medical Progress in the Past Fifteen Years

During the past two decades, there has been extraordinary medical progress, due to the application of the rapidly expanding knowledge in the basic medical sciences — particularly biochemistry and pharmacology — to the solution of clinical problems. This has placed powerful drugs in the hands of the physician, so that he no longer is only a sympathetic diagnostician but, like his colleague in surgery, has acquired the power to cure as well as to harm many of his patients. Following introduction of the sulfonamides in 1936, and the development of penicillin in the early 1940's, a steady stream of antimicrobial drugs has poured out of the pharmaceutical laboratories, thus totally changing the outlook in those bacterial infections which took so many lives in the past. Meningitis, osteomyelitis, pneumonia, tuberculosis, scarlet fever, ear and mastoid infections, and rheumatic fever no longer present the threat to life and health which they used to, provided they are recognized promptly and adequately treated. New drugs to control the growth of malignant cells, when added to the methods of surgical and radiological treatment, have greatly altered

the clinical course of leukemia and other malignant diseases in children. The development of ACTH and cortisone and its derivatives have introduced a new group of hormonal drugs which have far-reaching effects on metabolism and in the control of inflammatory diseases. Synthetic diets can now be constructed to avoid the biochemical blocks which heredity has erected in the path of development for some unfortunate babies, and as a result, a few forms of mental retardation can now be prevented if early recognition is followed by optimal treatment. With his ability to dissect the chemical processes of life and his versatility in constructing new compounds to affect them, the chemist has placed the equivalent of a sharp scalpel in the hands of the physician.

Meanwhile the biologists have not been asleep, and basic discoveries in virology have provided the means of exact diagnosis and often of prevention of many of the infections due to viruses. Since Dr. John F. Enders' basic development of improved tissue culture techniques only a few years ago, vaccines for poliomyelitis and measles have been made available, and the viruses causing chicken pox, German measles, cytomegalic inclusion disease (an important disease in the newborn) and a number of other illnesses have been discovered.

### *Effects on Medical Activities*

These dramatic advances in medical science have had a tremendous impact upon the health of children as they have been applied with increasing skill by physicians in the community. The result is a very marked change in the pattern of hospitalization and a shift in the problems which occupy the major attention of the Hospital Staff. These changes would not have occurred without the scientific advances

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which made them possible, but they are also dependent upon socio-economic developments which provided the resources to bring them about — a rising standard of living, improved housing, and greater availability of well-trained general and pediatric physicians and of improved community hospital facilities in the metropolitan area.

Changes in Hospital Activities

The effect of these changes upon the activities of our Department are highlighted by the following figures for the fifteen year period between 1946-47 and 1961-62:

<u>Activity</u>	<u>Change in</u>	
	<u>15 years</u>	
	<u>Inc.</u>	<u>Dec.</u>
	<u>by</u>	<u>by</u>
Medical Out-Patient Services		
Total Visits to Clinics	80%	
Medical In-Patient Services		
Total Admissions	26%	
For short-term care	43%	
For long-term care		40%
Total Hospital Days		45%
Short-term care		18%
Long-term care		72%

Despite the facts that nearly twice as many visits are now being paid to the Out-Patient Services and that there are very sizeable increases in the number of patients being admitted for short-term diagnosis or treatment, there has been a striking decline in hospital days. This is most marked for beds devoted to long-term convalescent-type care. These changes seem to reflect the following trends: first, despite the increase in the number of pediatricians and pediatric beds in other hospitals of the metropolitan area, our out-patient facilities continue to be used for consultation and our

wards for the care of sick children in large numbers; second, better medical treatment has shortened the stay of patients in the Hospital; third, better housing, increasing appreciation of the desirability of keeping a child at home with his family, and rising costs have all cut down on prolonged hospitalization.

Further analysis of the changes in utilization of the Out-Patient Services shows that there has been little change in the volume of services rendered by our appointment clinics but spectacular growth in activity of the Medical Emergency Clinic, where patients are seen at any time of day or night without appointment. No figures are available for this clinic prior to 1949 when there were 3,139 visits. By 1956-57 this had increased to 5,506 visits, but, in the five years since that time, the number of visits has increased by 218 per cent. This appears to be a rather general trend in U. S. hospitals.<sup>(1)</sup> A summary of the statistics for the Medical Out-Patient Clinics during the past five years follows:

<u>Clinic</u>	<u>Visits to</u>	
	<u>Medical Clinics</u>	
	<u>1956-57</u>	<u>1961-62</u>
Emergency	5,506	17,324
Child Health Unit	2,839	3,158
Medical Out-Patient		
Department	17,758	17,799
Adolescent Unit	4,827	5,331
Total Visits	30,940	43,612

A study of this clinic experience by two members of our own staff<sup>(2)</sup> shows, as have other such studies, that this clinic is not an emergency clinic dealing mainly with acutely ill or injured children, but actually a general dispensary to which various types of patients come, sometimes from considerable distances, for a variety of reasons. Further study and, possibly, change in the services offered by such

a clinic may be necessary. It is apparent that many patients mistakenly believe they are receiving complete pediatric care when they come to a clinic designed primarily to meet only emergency needs.

<sup>1</sup>Shortliffe, E. C., Hamilton, T. S., and Noroian, E. H.: The Emergency Room and the Changing Pattern of Medical Care. *N. E. J. Med.* 250:20-25, 1958.

<sup>2</sup>Bergman, A. B., and Haggerty, R. J.: The Emergency Clinic. *Am. J. Dis. Child.* 104: 20-25, 1958.

Changes in Mortality

During the past year, 171 patients died on the various medical wards of the Hospital. In 85 per cent of these cases post-mortem examination was performed; this fact is heartening evidence that these children will not have died in vain, but will have contributed to the better care of similarly affected children in the future. Furthermore, it indicates that the fine rapport between Hospital Staff and parents continues as in the past. The Children's Hospital has consistently remained among the top ten non-governmental hospitals in this country in percentage of post-mortem examinations, which is taken as an important index of hospital standards. The actual causes of death have changed markedly in recent years, in line with national mortality figures. Infections, which used to be the major cause of death in infancy and childhood, have been largely replaced by prematurity, congenital malformations, accidents, malignant tumors, and a few unsolved chronic diseases.

Morbidity Today

Although mortality statistics point to the most serious shortcomings of medical knowledge or the failure of society to put this knowledge to use, morbidity — or the state of ill health, much of it due to so-called minor illnesses — occupies most of the physician's time. As part of the total complex of facili-

ties for the medical care of children in the community, the C. H. M. C. plays an important role in meeting this burden of disease. Practicing physicians, public health clinics, and community hospitals handle the prevention and treatment of the majority of ordinary illnesses. As a community hospital in part, the C. H. M. C. cares for such illnesses when they occur in patients of our Staff members or in patients living in this area who do not have a family physician. It is important that we continue to care for these patients both as a community service and for the education of our House Officers. But the unique service of our clinics and wards is to serve as a resource to assist the practicing physician who is faced with a diagnostic or therapeutic problem in a child with which he cannot deal. Thus the patients who come to the C. H. M. C. reflect both the prevailing trends of morbidity and the inadequacies of contemporary medical practice. They fall into several major categories: (a) children suffering from rare, unknown, or presently untreatable diseases; (b) children suffering from serious illnesses or handicaps requiring highly specialized care; (c) children suffering from preventable or treatable diseases who, for one reason or another, have not received medical attention in time to prevent serious disease; (d) children suffering from common conditions which the practicing physician has not been educated to deal with (principally disturbances of growth, development, behavior, or learning); and (e) children suffering from conditions which the practicing physician has recognized and treated properly, but for which he requires the backing of a large institution in order to satisfy the parents.

Thus, based upon the kinds of patients referred to us today, it would seem to be our primary responsibility

to do the following: (a) *to provide expert care* in new, specialized, and only partially explored fields of treatment; (b) *to develop solutions, through intensive research*, for the unsolved problems posed by the remaining life-threatening or handicapping diseases and by the many disturbances in learning or behavior which are so devastating in an era when intellectual competence is essential to economic security and emotional adjustment so necessary to both satisfactory performance and personal happiness; and (c) *to educate parents and physicians*, so that preventable disease does not develop as a result of negligence or ignorance.

#### *Organizational Changes and Developments at the Hospital*

These great changes in medicine have led to a series of new developments within the Hospital. These represent its adjustment to the responsibilities imposed by its traditions and to the opportunities for progress in the medical care of children presented by the advances in medical science and the new funds made available for medical research since the war. Although this report concerns the Medical Department, it should be stressed that many of these developments represent the combined efforts of several Departments and have been the product of the joint thinking and planning of members of the Department of Medicine, of the Staff Executive Committee and of its Planning Committee, under the Chairmanship of Dr. Sidney Farber.

#### The Development of New Services

Since 1946, a whole series of new specialized services has grown up in response to the changing needs and opportunities in pediatric medicine.

##### *Cardiology Division*

The brilliant series of advances in the surgical treatment of congenital mal-

formations of the heart and great vessels begun by Dr. Robert E. Gross in 1938 has challenged the other Departments of the Hospital to provide the support which is needed for the diagnosis and care of a large group of patients who no longer are permanently handicapped children for whom little can be done. During the past twelve years the Cardiology Division under the leadership of Dr. Alexander S. Nadas has gathered a group of physicians specializing in cardiology, who not only carry an enormous load of patient care, but who are actively engaged in teaching and investigation and are attracting top-flight people to the C. H. M. C. for training. The Cardiac Clinic, which is our second largest special medical clinic, and the laboratories and ward services of the Sharon Cardiovascular Unit provide a complete spectrum of activities in this new branch of pediatric medicine. The far-sighted move by the Trustees of the Sharon Sanatorium of combining their resources with ours in constructing the Sharon ward in The Children's Hospital in 1949 has created a splendid facility where specially skilled surgeons, physicians, and nurses work as a team in the care of the victims of congenital heart disease.

##### *Tumor Therapy Service*

Special facilities for the care of patients with disseminated tumors were created by Dr. Farber to meet the opportunities for specialized treatment which appeared when he and his associates first demonstrated that drugs could control leukemia in children for considerable periods of time. Staffed by physicians who hold appointments in the Medical Department and organized to function as a unit with the clinic in the Children's Cancer Research Foundation, the Tumor Therapy Ward of the Hospital has served children with disseminated tumors, and



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their parents, with both skill and kindness.

### *Neurology Service*

The neurological unit was the first specialized medical unit to be developed at The Children's Hospital under Dr. Bronson Crothers in the 1920's and pioneered in the study of children handicapped by birth injuries or other causes. Aably carried along by Dr. Randolph K. Byers after Dr. Crothers' retirement, its growing importance was recognized this year by its organization as an independent Department of Neurology on July 1, 1962, under the distinguished leadership of the first Bronson Crothers Professor of Neurology, Dr. L. Lahut Uzman.

### *Rehabilitation*

Closely related to Neurology, but cutting across the activities of many Departments, is the field of rehabilitation, which comprises the evaluation of the handicapped child and the planning and establishment of a long-term program of care which will enable him to realize his maximum potential for a productive and satisfactory life. This requires the diagnostic and therapeutic skills of many different branches of medicine and the so-called paramedical disciplines. As the pediatrician responsible for coordination of interdepartmental activities in the management of children with cerebral palsy, Dr. William Berenberg has worked closely with Dr. Byers in Neurology, with Dr. Edith Meyer Taylor in Clinical Psychology, and with Dr. William T. Green and his colleagues in the Department of Orthopedic Surgery, who have provided great leadership in this field through the years, and with many other members of the Staff of different Departments in the development of a program of rehabilitation. It is not an accident that the Cerebral Palsy Clinic of the C. H. M. C. was

selected by the American Academy of Cerebral Palsy as the best one in which to make an evaluation of methods of treatment for this condition. This year also marks the end of the Cerebral Palsy Nursery School, an experimental school started in 1950 to develop methods for overcoming some of the learning handicaps of the cerebral palsied child. This school was able to get a considerable number of children ready for entrance into regular schools, and, now that its methods have been introduced into various educational programs, it has completed its mission.

### *Psychiatry*

In 1947 Dr. Dane Prugh joined the Department of Medicine as the first full-time staff psychiatrist in the Hospital with the support of a bequest from the late Harold Brenton. After developing a program of teaching, research, and psychiatric care which rapidly outgrew its space and resources because of the tremendous demand for psychiatric consultation and therapy, the Department of Psychiatry was established as an independent service under the leadership of Dr. George Gardner in 1955. Close relations have been maintained between the Departments of Medicine and Psychiatry, and it is hard to see how we ever got along without the strong support provided by the Psychiatric Staff in the care of our patients and in the training of our House Officers and Fellows in the growing field of psychological pediatrics.

### *Adolescent Medicine*

The original planning for the C. M. C. called for an extension of our facilities to permit the Staff to care for patients throughout the full period of growth. In order to develop facilities for the care of adolescent patients, Dr. J. Roswell Gallagher joined the staff of the Department in 1949. The Adolescent

Unit which he created has now come of age. Its example has led to the establishment of many similar units throughout the country, and it has trained many of their leaders.

### *Endocrinology*

Few fields of medicine are as basic to pediatrics as endocrinology. Growth is the fundamental biological process which characterizes the healthy child; the endocrine glands, under the control of the hypothalamic portion of the brain, are the regulators of growth and of most other metabolic processes. Hence it was essential to have a group of physicians and scientists working in endocrinology if we were to help the many children referred to us because of disturbances in the growth process. Dr. John F. Crigler, Jr., and his colleagues, Norman Gold, Ph.D., and Jerome Grunt, M.D., Ph.D., have created an admirable unit for the care of patients and for teaching and research in this field. We were fortunate to have access to a considerable area of new laboratory space in the Good Samaritan Building, permitting this valuable development.

### *Genetics and Hematology*

In 1946, Dr. Louis K. Diamond was receiving a grant of \$10,000 per year from the Hood Foundation for research in pediatric hematology and had begun to devote most of his time to the study and treatment of diseases of the blood in children. The development of the Blood Grouping Laboratory to serve the needs of a group of Boston hospitals, the organization of one of the busiest hospital blood banks in the country, and the development of an excellent program of research and research training in pediatric hematology during the past fifteen years, when Dr. Diamond has also served as Associate Chief of the Medical Service and carried a large share



of the clinical work and teaching of the Department, are a tribute to his energy and organizing ability. Out of his interest in blood diseases and the blood group incompatibilities, based on hereditary differences between the red blood cells of one individual and another, has grown a deep interest in clinical genetics. He has established a well equipped Clinical Genetics Laboratory in the old Ida C. Smith Building, where Dr. Park S. Gerald, this year's winner of the Mead Johnson Award of the American Academy of Pediatrics, and Dr. Mary Louise Efron are busily exploring many of the biochemical manifestations of genetically induced diseases. The presence of this group in this Department; of Dr. George Yerganian, a distinguished biologist, in the Children's Cancer Research Foundation; of Dr. W. Eugene Knox in biochemistry at the New England Deaconess Hospital; and of Dr. Claude Villee at the Boston Lying-in Hospital provides an outstanding group of scientists in the Harvard Medical area competent in many aspects of human genetics, a field of tremendous importance for the future.

#### *Other Specialized Services*

Other specialized services have developed in response to the needs for expert care of special groups of children—the Seizure Unit, first under Dr. William G. Lennox and now Dr. Cesare Lombroso, for children with epilepsy; the Nutrition Clinic run by Dr. Harry Shwachman for the care of children with cystic fibrosis, celiac disease and other disorders of nutrition; the Renal Clinic caring for a large number of children with nephrosis under Dr. Francis X. Fellers' guidance; and a very large and active Allergy Clinic formerly under Dr. Lewis Webb Hill and now directed by Dr. Harry L. Mueller. In addition, other laboratories offering facilities

with certain special techniques have also been created to provide new resources for the better care of our patients. These include a laboratory for protein studies, which has been extremely productive under Dr. David Gitlin's leadership, and a laboratory for respiratory physiology, in which Dr. Charles D. Cook and his associates have greatly strengthened our ability to understand and deal with disturbances of respiration in children.

The foregoing summary simply indicates the rapid expansion in the pattern of services and activities in pediatric medicine which have been brought about by the advance of medical science during the past sixteen years. These developments are only parts of an over-all pattern. Many of these activities cut across departmental lines, and are part of the planning and development of The Medical Center as a whole. None of them could function without support from all the other Hospital Services, particularly the Division of Laboratories and Research, the Radiology Department, and the supporting services in Maintenance and Administration. They would not have been possible without new funds—training grants and research grants from the National Institutes of Health, grants from a number of private foundations, gifts from individual donors, and contributions to special units from the appropriate voluntary health agencies. The new services generated by these funds are the life-blood of the Hospital. It is their availability which brings patients to the Hospital, their activities which attract funds to its support, and their success which ultimately creates problems for the Hospital by eliminating or simplifying the treatment of those diseases which used to fill our wards and clinics.

The Disappearance of Old Services  
Medicine has been described as a pro-

fession which is trying to do away with itself. There is still a long way to go before we can achieve this professional goal, but there have been some notable reductions in certain services of the Hospital.

#### *Poliomyelitis*

Dr. Enders joined the Division of Laboratories and Research in 1947 at Dr. Farber's invitation, and established the Research Division of Infectious Diseases. In 1949, with Robbins and Weller, he announced the successful propagation of the poliomyelitis virus in tissue culture by a technique eminently suited to growing viruses for the preparation of vaccine. In 1954 the Salk vaccine was introduced on a mass trial basis, and in the summer of 1955 Massachusetts had its worst polio epidemic since 1916. One thousand, two hundred fifty patients with poliomyelitis were admitted to the C. H. M. C. that summer. Since that dreadful summer, the disease has slowly declined. Last year we saw no proven cases of poliomyelitis on our wards. This change not only has had an immediate impact upon the Medical Department, but will obviously alter the case load in Orthopedic Surgery and Physiotherapy over the coming years. To the casual observer, however, there is no evidence that the work load of the latter groups has diminished. Despite the striking decline in cases of poliomyelitis, there are many other crippling conditions which require treatment.

#### *Contagious Diseases*

The Isolation Building was constructed in 1929 to provide two floors of isolation facilities for the care of children with contagious diseases. In 1949 this building was enlarged by the construction of three more ward floors above the original two, and the seventh or top floor was designed to provide

## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

facilities for the care of patients requiring strict isolation — almost entirely poliomyelitis in the summer and fall. When the Farley Building was constructed in 1956, this seventh floor ward was incorporated into the general Medical Service. Today there are seldom more than one or two patients requiring strict isolation for contagious diseases, although isolation facilities are required at times for the care of patients infected with bacteria which have become resistant to the widely used antibiotic drugs.

#### *Rheumatic Fever*

A diagnosis of rheumatic fever in a child fifteen years ago frequently meant hospitalization for from four to twelve months; many of these children, who had to be rehospitalized for recurrences of their disease in succeeding years, developed increasingly severe heart disease from these recurrences. Although there is no evidence that the number of first attacks of rheumatic fever has declined greatly during the past ten years, the duration of the initial attack has been shortened, and rheumatic fever recurrences have been almost totally eliminated by penicillin prophylaxis. The result is a tremendous decline in the number of days of hospitalization and a marked alteration in the pattern of the disease.

#### Care of Children in the Hospital

Were the Hospital to be revisited today by a physician who had worked there forty years ago, he would be horrified to find parents in the Hospital every day and possibly one or two parents sleeping in. He would find a slight disorderliness reminiscent of home in most of our patients' rooms, would discover a number of children from different wards finger painting or playing with water, clay or other materials together in one of the ten play or occupational therapy

rooms scattered through the Hospital, or he might come upon a group of children eating together, family style. Even as recently as fifteen years ago, parents were only allowed to visit their children for two hours on Saturday afternoons for fear of bringing in infections, and patients were seldom allowed to mingle with one another because of the danger of cross-infection. There was good reason to fear the transmission of infections, because there was no way to treat them. Consequently, although the kindness and TLC (tender, loving care) needed by infants and small children was dispensed as abundantly as possible by doctors and nurses at The Children's Hospital, the psychological needs of the children for companionship and for the support of their parents had to be sacrificed for their physical protection. The advent of protective vaccines, gamma globulin, and antimicrobial chemotherapy has reduced the risks of infection to the point where, so long as we carefully isolate those children who are harboring dangerous organisms until their infection is controlled, and we surround particularly vulnerable patients, such as premature infants, with protective barriers, it is possible to meet the psychological and emotional needs of our patients to a considerable extent.

The development of an adequate play program in the Hospital goes back a long way to the neurological unit organized by Dr. Crothers, to the group programs in the old orthopedic ward, and to the establishment of the Brenton Unit for psychological pediatrics on the Medical Service under Dr. Prugh in 1948. The latter organized a study of ward management for patients from two to twelve years of age in an effort to see whether benefits were to be derived from a program aimed at meeting children's psychologi-

cal as well as physical needs in the Hospital. The study clearly demonstrated that, for younger children particularly, such a program helped the child to tolerate hospitalization with less evidence of emotional disturbance during the hospital stay and after discharge than was the case with the conventional hospital routine.<sup>(3)</sup> The key to the program was an experienced Nursery School teacher, Miss Staub, who understood young children and their needs, but it required the full support of nurses and medical Staff to be effective.

<sup>3</sup>Prugh, D. G., Staub, E. M., Sands, H. H., Kirschbaum, R. M., and Lenihan, E. A.: A Study of the Emotional Reactions of Children and Families to Hospitalization and Illness. *Am. J. Orthopsychiatry* XXIII:70, 1953.

Since moving into the new building in 1956, with its abundant play space, the Department of Patient Education and Recreation has slowly developed and grown until it is now organized very effectively under Mrs. Barbara Patterson's leadership and with the guidance of a special committee of the Staff. Important as is play for its own sake, it provides an opportunity for the child to relieve his inevitable anxieties and frustrations through constructive forms of self-expression and thus is an important part of the total treatment program. There is much still to be done along these lines, for example, in some cases bringing parents more fully into the treatment program, and improving the ways in which food is served to children. Nevertheless, the change in the atmosphere of the Hospital in this regard over a fifteen-year period is striking.

#### Changes in the Educational Program

A few years ago a former Children's Hospital alumnus wrote an editorial about what he called "The New Pediatrics," which gave rise to much dis-



cussion about the future of pediatrics. In the course of this discussion it became apparent that a certain number of practicing pediatricians were unhappy with their lot—primarily because their training in a university hospital for careers as specialists had not fitted them adequately for the family-type of pediatric practice in which they found themselves upon completion of their highly specialized training.

The development of pediatrics in The Children's Hospital Medical Center has gone further and further along the path of specialization. This is a natural outgrowth of the advance of knowledge through research. As more is learned, the segment of knowledge which one human brain can master and use becomes narrower and narrower. Breadth must be sacrificed for depth. However, this need not and should not mean that the specialist in pediatric medicine or surgery cannot deal in a comprehensive and effective manner with the general needs of a sick child.

However, in the practice of pediatrics in the community, the pediatrician is a general practitioner; he must supervise the health of his patients, treat a large number of minor illnesses, and serve as a family counsellor, particularly in regard to many phases of the physical, intellectual, and emotional development of the growing child. As the person with the power to save life, particularly during the most helpless portion of the life span of the individual, he is in a particularly strategic position in this role of counsellor during the critical first five years, before the child enters school. It is during this period that much of the personality structure of the individual is formed and that handicaps should be recognized and dealt with as effectively as possible. How is the future practitioner to be trained for his role?

This is a problem with which every pediatric educator is faced. We have developed an approach based on the concept that there is a body of knowledge, derived both from the behavioral sciences (psychology, anthropology, sociology), and from such disciplines as epidemiology, which gives real intellectual content to a specialty of family medicine. Like most other specialties, what is not known far exceeds what is known, but methods are available for studying the problems and hence research is possible, providing an intellectual challenge for the future and the opportunity for improving our practices.

In putting this concept to work in the educational program, two approaches have been used. First, every medical House Officer participates in family pediatric practices under supervision. During his stay he is assigned several families, whose children he cares for as their family pediatrician throughout his one, two, or three years of service. Moreover, one of his rotations involves an assignment to the Child Health Unit, where he has an opportunity to go more deeply into the field of social and preventive pediatrics in intimate association with the Staff. Second, throughout his training period he has abundant opportunities to consult with and learn from pediatric psychiatrists regarding his own particular patients seen on the wards or in the Out-Patient Department. During the period of out-patient duty, this association with psychiatrists is particularly close. For those House Officers completing their basic pediatric training, there are fellowships available, providing further opportunities for one or two years of advanced training in ambulatory pediatrics, utilizing the combined resources of the Emergency Clinic, the Medical Out-Patient Department, the Adolescent

Unit, the Child Health Unit and Family Care Program, and the Department of Psychiatry. These fellowships have been provided by the Children's Bureau, the Grant Foundation, and the National Institute of Mental Health. Trainees are not only encouraged to increase their knowledge and experience in common pediatric problems, but to pursue some investigative project. It is our hope that some of those who have had this type of training will be able to continue some clinical research in their own practices and thus not only add zest to their work, but learn to replace the empiricism of so much of practice with a more scientific and critical approach.

Some of the investigations which have been undertaken by Fellows and Staff in this program include a study of the epidemiology of accidents, a study of the reasons for failure of patients to keep their appointments with the clinic, an investigation into the nature of the use of the Emergency Clinic, and a study of the development of respiratory infections in families. Thus the Department has tried to approach the problems of medical care as a legitimate field for investigation, teaching, and specialized training, feeling that knowledge about children and their diseases will not be of much use unless it can be effectively applied in the setting of practice.

### A Look Ahead

After this look at what has happened to pediatrics and thus to our Hospital over the past fifteen years, we must try to project our plans ahead to provide the kind of services which will utilize our resources most effectively for the benefit of children during the coming years. As a *service Institution*, we have an obligation to provide to children the best possible medical care; as a *teaching Hospital*, to educate physicians and other health workers in

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the most modern techniques of diagnosis, treatment and child care, as well as to give them a basic scientific foundation which will enable them to meet the inevitable changes of the coming decades; and finally, as a *research Institution*, to continue to find solutions to those medical problems for which no satisfactory form of treatment or prevention exists.

### Medical Care

Our obligation to provide the best possible pediatric care is double: to the children whom we serve and as an example to the physicians and other health workers whom we train. In order to do this we must do three things: first, strengthen the general clinical Staff, whose major function is diagnosis and general medical treatment of sick children; second, develop physicians with special skills and interests to meet the particular needs of groups of children who require specialized treatment; and third, improve certain physical facilities which are essential to the achievement of the two preceding goals.

*Strengthening the general clinical Staff* is an essential step in improving our diagnostic and therapeutic services—particularly in the ambulatory clinics—but on the wards as well. Fifteen years ago when there were only a few pediatricians in the community, the kind of patient referred to our ambulatory clinics was usually one whom any pediatrician could handle. Today, with at least half of the children in this area being cared for by pediatricians, many of our patients are referred for expert diagnostic appraisal to us by pediatricians who may have been trained in our own Hospital. This requires us to provide a pediatric consultant with an unusual breadth of knowledge and diagnostic skill, who can utilize the extraordinary resources of the Hospital for the patient's bene-

fit. Three groups may possibly be involved in this function: members of the full-time Staff with offices in the Hospital, House Officers in training, and members of the part-time Staff who are practicing in the community, but who give some of their time to the Hospital. We certainly should add one or two more experienced pediatric consultants with strong general clinical interests as rapidly as we can support them and find office space for them, so that they can spend full time in the Hospital. Second, we should increase the training and experience in ambulatory care of our House Officers. Furthermore, if we are going to continue to attract and hold the outstanding type of Residents we have at present, we will need to provide more adequate stipends in the future, especially for the more senior men. Finally, we need to find better ways to use the splendid group of practicing pediatricians on the Staff. They make an important, in fact an essential, contribution to our program of education and patient care, which we acknowledge gratefully, and we need to experiment with ways which will utilize their particular talents more effectively for the benefit of our patients and students, while at the same time giving them a greater sense of participation in clinical activities, which are both stimulating and rewarding to them.

In the development of physicians with special skills and interests we are continuing the process of specialization in pediatrics which has already made the Institution great, both in care and in teaching. What are the fields of medicine where special knowledge and skills are needed in order to provide the best consultative advice and treatment? The list of those which seem to be essential at present follows: neonatal pediatrics; allergy and immunity; infectious diseases; rheumatic

diseases; dermatology; neuromuscular diseases; handicapping diseases and rehabilitation; cardiology; pulmonary diseases; renal diseases; metabolism and endocrinology; nutritional diseases; hematology; clinical genetics, including congenital malformations and inborn errors of metabolism; psychological pediatrics, including developmental disturbances, psychosomatic medicine, learning problems, behavior problems and mental retardation; social pediatrics; and adolescent medicine.

It is of interest that every one of these special fields is already represented by someone on the Staff of the Hospital, although not all of them are members of the Staff in Medicine nor are they all full-time. What are most needed to strengthen our activities in these special fields are: first, better facilities in terms of offices, clinic space, and particularly clinical research laboratories; second, more opportunities for stable full-time positions with tenure; and third, more collaboration between different Departments in providing care and in carrying on clinical investigation in these different fields. The need for facilities is obvious—without them we cannot expect to attract first-class people to our Staff. This need seems likely to be met in the near future in the new buildings for ambulatory services and clinical research now being planned. The need for stable, secure, full-time positions is equally obvious. Without such opportunities we cannot hold top-flight people. It is to be hoped that, within the next few years, it will be possible to cut the operating deficit to a point which will permit the Trustees to use our endowment most productively, as a means of stabilizing the positions of these essential members of the Staff whose work is the "guts" of the Hospital.



A great deal of collaboration already is going on in care and in research, but much more can be done and should be done in the future, since it is the cooperative efforts of different groups who can bring a variety of specialized skills to bear on a patient's problem that seem most likely to give him the full benefit of what our Institution has to offer. Furthermore, it is likely to be the combination of the imaginative ideas of individual laboratory scientists with their systematic exploitation by groups of cooperating clinical investigators which will make the most rapid progress in solving the disease problems which lie ahead. Perhaps what is most needed is better communication between those working in different Divisions and Departments of this Hospital and with those in the various departments of the Harvard Schools of Public Health and Medicine and the associated hospitals. All our planning should be aimed at maximizing opportunities for informal contacts between members of the Staff. It is to be hoped that the new Doctors' Dining Room will be a first important step in this direction. Out of such informal contacts, when problems of mutual interest are discussed, grow many of the most fruitful collaborative projects.

*Physical facilities* do not make an institution, but their lack or poor quality can hold back a vigorous one. This is what is happening to The Children's Hospital Medical Center at present. As far as the Department of Medicine goes, each year makes our needs increasingly clear.

The greatest clinical need is for improved facilities for Ambulatory Services. These out-patient services are the Hospital's face to the community. Through them the Institution serves most of the patients who come to it for help; through them pass those pa-

tients whose illnesses are of such a nature that they require in-patient care; and in them are carried on those long-term programs of care which permit us to make advances against the increasing proportion of chronic disease problems with which we are faced. A desperate need is for better and larger emergency clinic facilities where pediatricians and surgeons may work together in the diagnosis of acutely ill children. Clinic areas must be planned so as to permit flexible use at different times for different purposes, to provide care for both private and Staff patients, and to bring together groups such as pediatricians, psychiatrists, psychologists, and social workers in a diagnostic clinic or the various specialists concerned in rehabilitation or in evaluation of children with communication disorders.

The Family Care Unit, which is presently well housed in the old Brace Shop building, should ultimately become more centrally located in the facilities of the proposed hospital complex, since it involves the staff of the different hospitals concerned.

Equally urgently needed is space for clinical investigation. Research is the spearhead of our program. It is through clinical research that we are able to offer better care to patients, it is through opportunities for research that we can attract outstanding young people for training and to Staff positions, and it is our research activities which attract the funds which support so much of our work. At present our facilities for clinical research are scattered, crowded, and often inadequate. They need to be brought together in close proximity to the patients they are to help and in such a way as to promote interdepartmental contacts and collaboration. And finally they need to include not only offices and laboratories, but a clinical research ward area

where patients from any Service can be studied intensively and, consequently, better treated.

For medical ward areas, two developments are needed which dovetail closely with plans for the proposed hospital complex: a special ward area for the care of the newborn and an adolescent ward. The former is a natural joint enterprise with the Boston Lying-In Hospital, the latter a natural cooperative venture with the Peter Bent Brigham Hospital.

### *Teaching Physicians*

The educational opportunities which we can offer to physicians depend basically upon the quality of the Staff and their research. Our educational program already operates for several levels of educational experience: for Harvard Medical students, for House Officers in general pediatric training, and for Fellows in advanced training in special fields. These educational programs are going well and, judging by the high quality and number of applicants for internships, residencies, and fellowships, are successful. There is room for, and always are, constant efforts at improvement. Beyond these programs, most of us feel strongly that we have a major responsibility for the continuing education of those in practice, so that they may be kept abreast of the rapid advances in pediatrics. A short intensive course given by members of the Staff and lasting five days was organized two years ago by Dr. R. Cannon Eley at the suggestion of the Staff Executive Committee, and has proved very successful. This will be given for the third time this winter and seems firmly established as an annual attraction for practicing pediatricians from all over the country. Other methods for keeping the man in practice abreast of the progress of pediatrics need to be studied.

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*Teaching Parents*

The Hospital has done many things to educate parents in health matters through its *Accident Handbooks*, through booklets put out by the Department of Public Information to which Staff members have contributed, and through group therapy sessions. Here too is a public service which is much needed, and where considerably more might be done. Too many children still come to us without proper immunization or with a disease which could have been prevented, had the parent appreciated how potentially serious it was and called the doctor earlier.

*Research*

Research, in a clinical Department, should start from problems presented by patients and be primarily aimed at giving us a better understanding of a disease in scientific terms and thus of improving our chances of control of the disease process. Clinical investigation has two major objectives: first, to improve the care of the patient; and second, to utilize the unique opportunities often presented by patients to extend our fundamental knowledge. Thus it is both applied science and basic science.

Since clinical investigation is dependent upon advances in the basic medical sciences for the techniques and concepts which it must adapt to the study of patients, the clinical investigator must maintain close contact with the particular basic sciences which provide the intellectual and technical underpinning for his work. There are many different ways to achieve this, from periodic leaves of absence to work in a basic science laboratory, to having a basic scientist closely associated with the clinical investigative group. The way it is done matters little, as long as there is frequent and free communication.

During the coming period, the research interests of the Medical Staff will probably be built around certain techniques and basic fields of scientific interest which promise to provide a fruitful approach to major clinical problems. These should not be thought of as purely medical laboratories but as centers of research interest, where workers from any Department who wish to use the techniques and facilities may get expert help in the co-operative solution of clinical problems. These are the following:

Clinical Genetics, with particular emphasis upon human cytogenetics and biochemical genetics.

This field of investigation is concerned with the pathogenesis of congenital malformations, inborn errors of metabolism, and familial susceptibility to many different diseases. Thus it will be a necessary part of studies on congenital heart disease, clinical hematology, mental retardation and many other neurological diseases, as well as on diabetes, rheumatic fever and other diseases where there is a strong familial element. Its potential contributions cut across the interests of every clinical department, and thus its full development will ultimately require a large amount of space.

*Biochemistry and Metabolism*

Closely linked with genetics is biochemistry, which has become the major tool of medical research. Clinical applications of biochemistry enter into studies in the following broad fields: genetics, inborn errors of metabolism; endocrinology, the regulation of growth and metabolism; renal disease and electrolyte metabolism; diseases of bone; diseases of skeletal and cardiac muscle; cystic fibrosis and other nutritional diseases; and clinical pharmacology.

*Physiology*

Physiological techniques continue to be extremely valuable in the study of disease. They are of particular importance in the following clinical fields: cardiology, where there is close integration between both medical and surgical interests; pulmonary disease, in which research in medicine, surgery, anesthesiology, otolaryngology and orthopedics may come together; renal disease, where there is a splendid opportunity for close collaboration between medical and surgical investigators in dealing with problems arising from congenital malformations of the urinary tract; and neuromuscular diseases, a field which is of importance to medicine, neurology, and orthopedics.

*Immunology*

The techniques of immunology are important in unravelling the responses of the host to infectious agents and to various sensitizing chemical substances, including those derived from the patient's own tissues. This is important for the investigation of: allergic diseases; the rheumatic and collagen diseases; the possibilities of organ transplantation, of great importance for the future of pediatric surgery; and the infectious diseases.

*Behavioral Sciences*

Techniques and knowledge from the behavioral sciences should make an increasingly important contribution to pediatrics through the sciences of: development, which is concerned with the integrated study of psychological, neurological, physiological and biochemical maturation; psychology, which is of particular importance to the study of learning handicaps and behavior disturbances; and sociology, which is of particular importance to studies on the provision and effectiveness of medical care.

Although these seem to be the

principal foci of research interest for the immediate future, the rapid development of new techniques, such as those of biophysics, will undoubtedly extend these centers of interest in many directions which can only be dimly foreseen at present. If we are to solve the problems which are the cause of the greatest morbidity and mortality, we must provide access to basic scientific thinking and excellent laboratory facilities, which will permit the application of new techniques to old problems, for a group of alert scientifically-minded and -trained physicians, surgeons, psychiatrists, radiologists, and pathologists who are competent in the treatment and clinical investigation of specific diseases. Given an opportunity to work in an atmosphere of freedom where there are frequent opportunities to collaborate with and stimulate one another, the history of our Institution makes it abundantly clear that rapid progress will be made toward the ultimate goal of turning the *Hospital into a center for the promotion of health*.

A few personal notes are in order. Dr. Clement A. Smith received the Borden Award of the American Academy of Pediatrics in October, 1961, and Dr. Park Gerald received the Mead Johnson Award of the same organization in October, 1962. Dr. Robert J. Haggerty, who has been on leave of absence to study social pediatrics in England and Europe during the year 1961-62 as a Faculty Scholar of the Commonwealth Fund, has been named a Markle Scholar for the five-year period from July, 1962.

In closing this report, I should like to express my appreciation to all those Staff members, House Officers, nurses, social workers, recreation workers, technicians, secretaries, and workers in the administrative services whose joint efforts make the Hospital the

kind of place it is. What it is or can be is perhaps best expressed by quotations from two letters. The first is from a foreign physician as he was leaving after a year's training:

I would like to express to you, and all the people of The Children's Hospital, my deepest thanks for this great opportunity to study and to do research work in The Children's Hospital Medical Center. Thank you also *and particularly* for the great and generous hospitality of the American people toward me.

Thank you for all.

And in another letter, the wife of a physician in training whose small boy was admitted for emergency care wrote as follows:

This past week our son was a patient at Children's. Although my husband has worked at The Children's Hospital Medical Center for more than a year, my only impressions were seen 'thru a glass darkly.' I conceived of it as a very lofty institution with a loftier reputation. I also misunderstood that reputation to be based solely on clinical and academic excellence.

I stand corrected and rebuked. The entire staff of the Division and many others cared for our son as if each were his parent. Not during one moment can I imagine one thing more anyone could have done to ease an upset mother or care for a sick little boy.

I feel very grateful and humble. Although I've tried to thank each person as they helped us, I wanted to tell you how completely and thoughtfully our son was treated and how much I appreciate everything.

Because of the length of this report, no specific reports from the various Divisions will be included this time. The list of those who have been trained during the past two years and the publications of the Department give some idea of the great activity which has been going on.

Charles A. Janeway, M.D.  
*Physician-in-Chief*



## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

## DEPARTMENT OF MEDICINE

## House Staff

July 1960-June 1961

## INTERNS IN MEDICINE

Theodore Friedmann, M.D.  
John W. Mitchell, Jr., M.D.  
Kenneth S. Robson, M.D.  
Peter B. Rosenberger, M.D.  
Jon B. Tinglestad, M.D.

JUNIOR ASSISTANT RESIDENTS  
IN MEDICINE

Alberto Abadi (Aljanet), M.D.  
William B. Bason, M.D. 10/1/60-12/31/60—  
Chelsea Naval Hospital  
William D. Bradford, M.D.  
Martha A. Carpenter, M.D.  
Stephen Preston Clement, Jr., M.D.  
Carl de Luca, M.D. (Affiliating Junior Assistant Resident in Medicine for Ambulatory Services — from Rhode Island) 1/1/61-6/30/61  
Robert Thomas Dooley, M.D. 4/1/61-6/30/61  
—Chelsea Naval Hospital  
Ralph Earle, Jr., M.D.  
Florence Geller, M.D.  
John L. Green, M.D.  
James Hughes, M.D. 7/1/60-9/30/60 —  
Chelsea Naval Hospital  
Peter R. Huttenlocher, M.D.  
A. Myron Johnson, M.D.  
Ira Marks, M.D.  
Ann M. Michelson, M.D.  
Denis R. Miller, M.D.  
Beale Hibbs Ong, M.D.  
Ammon Rosenthal, M.D.

SENIOR ASSISTANT RESIDENTS  
IN MEDICINE

Abraham B. Bergman, M.D.—(On leave of absence at St. Mary's in London)  
Edward M. Brett, B.M., B.Ch., M.R.C.P. (1/1/61-12/31/61)  
Moon Yong Chung, M.D.  
Gerald M. Fendrick, M.D.  
Jaime L. Freundt-Thurne, M.D.  
Milton S. Grossman, M.D. (to 12/31/60)  
Richard A. Katz, M.D. (to Aug. 31, 1960)  
Martin R. Klemperer, M.D.  
Oliver F. Roddey, M.D.

## CHIEF RESIDENT IN MEDICINE

David Carver, M.D.

CHIEF RESIDENT IN THE MEDICAL  
OUT-PATIENT DEPARTMENT

A. A. Douglas Moore, M.B., B.S.

## DEPARTMENT OF MEDICINE

## House Staff

July 1961-June 1962

## INTERNS IN MEDICINE

Ralph B. Bell, M.D.  
Bernard Moss, M.D.  
George L. Robb, M.D.  
David W. Walton, M.D.  
Jordan R. Wilbur, M.D.

JUNIOR ASSISTANT RESIDENTS  
IN MEDICINE

Matthew A. Budd, M.D.  
Thomas F. Anders, M.D. (to 1/15/62 when he was drafted)  
George W. Brumley, M.D.  
Gerald W. Fernald, M.D.  
Theodore Friedmann, M.D. (to 1/15/62 when he was drafted)  
John W. Mitchell, Jr., M.D.  
Peter S. Rosenberger, M.D.  
Jon B. Tinglestad, M.D.

ASSISTANT RESIDENTS IN  
MEDICINE

Martha A. Carpenter, M.D.  
Ralph Earle, Jr., M.D.  
Florence Geller, M.D.  
Ghamar Hashemee, M.D. (1/1/62-6/30/62)  
Ira Marks, M.D.  
Beale H. Ong, M.D.  
Charles E. Burdon, M.D.  
Lorne K. Garretson, M.D.  
William E. Hodgkin, M.D.  
A. Myron Johnson, M.D.  
Ammon Rosenthal, M.D.  
Denis R. Miller, M.D. (On leave of absence at St. Mary's in London)  
Suzanne Brunet, M.D. (Tumor Therapy)  
Sylvio Bernaldo Margulis, M.D. (Tumor Therapy)

## RESIDENTS IN MEDICINE

Edward M. Brett, B.M., B.Ch., M.R.C.P. (to 12/31/61)  
David H. Smith, M.D.  
Michael J. Tynan, M.D. (1/1/62-6/30/62)  
Pacita J. Mariano, M.D. (Tumor Therapy)

## CHIEF RESIDENT IN MEDICINE

Robert A. Goodell, M.D.

CHIEF RESIDENT IN THE MEDICAL  
OUT-PATIENT DEPARTMENT

Joel J. Alpert, M.D. (8/21/61-6/30/62 Acting Chief Resident in M.O.P.D. 7/1/61-8/21/61)  
Ammon Rosenthal, M.D.

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## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

REPORT OF CHIEF,  
ADOLESCENT UNIT

In this past academic year the Adolescent Unit's activities have been carried out in a reasonably satisfactory fashion. We have been able to retain all but one member of our teaching Staff, and have obtained an able replacement for him; have added two other physicians to our Staff; served a somewhat greater number of patients than in 1961; have enrolled a particularly cooperative and enthusiastic group of postgraduate trainees; and have seen a steady increase in interest in the care of adolescents in other medical centers.

Dr. Walter Goodale reluctantly resigned his position with us in September 1961 because of the press of other duties; he has been replaced by Dr. Alla C. Zaver, a member of this Hospital's Cardiology Division. Dr. Harry Stults, a trainee here three years ago, has returned on a full-time Staff basis to fill the vacancy caused by Dr. Felix Heald's transfer to the Children's Hospital in Washington. Dr. Warren Guild, an internist and a member of Dr. Thorn's Department of Medicine at the Peter Bent Brigham Hospital, has joined us as a Consultant in Internal Medicine; he has a special interest in such matters as fitness, fatigue, and obesity.

In addition to their teaching duties within our Unit, many physicians on our consultant Staff also participate in a variety of teaching sessions which affect other physicians' understanding of adolescents' medical care. They have, for instance, been most generous in giving their time to such meetings as The Children's Hospital's Annual Postgraduate Course, the New England Postgraduate Assembly, and the Massachusetts Medical Society's Postgraduate Medical Institutes. With the widespread interest in the medical care of adolescents it becomes increasingly important for us to maintain this Staff and to offer this type of

postgraduate instruction. Also, in an effort to strengthen our teaching program and to gain a broader community understanding of our activities, Mr. Sutherland has arranged a series of joint meetings with representatives of a variety of local social service agencies. These have been very successful and we intend to continue to include them in our regular conference schedule.

Our research efforts are gradually developing into a more satisfactory program. The study of auto accidents is in its final stages, material regarding Serum Iron Levels is being prepared for publication, and studies aimed at classifying various types of obesity are well under way. Attempts begun last year to develop satisfactory methods for the pre-school screening of little children are being continued with the cooperation of the Wayland school system.

At present three new projects which should increase our usefulness to the community are being planned. First, a review of the health needs of the Boys' Clubs of Boston: this assessment, long overdue, has been stimulated by the extensive changes in the Boys' Clubs facilities and programs which Boston's urban renewal plans have made necessary. Second, we have become concerned with the development of an intensive one-week postgraduate course in Medical Care of Adolescents: this would seem to be more practical for, and of greater interest to, a larger number of practicing physicians than our present one-month course. And finally, on the basis of such experience as we can gain from a series of small seminars in cooperation with the Harvard Graduate School of Education and the Harvard School of Public Health, we hope to develop a year's course for school health personnel which would concern itself with the problems and practices relating to



the school health program. In addition, Dr. John A. Spargo of our Staff has accepted a part-time position in the Student Health Service at Northeastern University; he will continue to direct the school health program in Quincy.

In September 1961 Campus Film Productions made a thirty-minute color-sound motion picture, "Medical Care for Adolescents," for Merck, Sharp and Dohme's Public Service Series. Most of this was filmed at this Unit: the bed-care section was made in Dallas at Baylor Medical Center. It was first shown at the annual meeting (November 1961) of the Southern Medical Association. The fact that Merck has recently felt it necessary to order twenty additional copies of this film in order to meet its requests indicates that it has been favorably received.

During the period from July 1, 1961 through June 30, 1962 there have been 6,341 visits to our Out-Patient Department and a total of 814 new patients.

J. Roswell Gallagher, M.D.  
Chief, Adolescent Unit

### Publications

Gallagher, J. R., The Doctor and Other Factors in Adolescents' Health and Illness. *Journal of Pediatrics* 59:752-755 (Nov.) 1961.

———, That Favorite Teacher: A Parent's Enemy or Ally? *Marriage and Family Living*: XXIII, Nov. 1961.

———, Ways to Improve Your Treatment of Adolescents. *Consultant*: 40-45 (Dec.) 1961.

———, Some Aspects of Adolescents' Medical Care. *Postgraduate Medicine* 31:190-194 (Feb.) 1962.

———, The Physician's Role in Treating Adolescent Disorders. *Feelings* 4:1-4 (May) 1962.

———, Weight Control in Adolescence. *J. Amer. Dietetic Assoc.* 40: 519-520 (June) 1962.

———, Chapter III — Characteristics of Children and Adolescents (The Adolescent in Secondary School) in *Health Education*, Moss, B. R., et al., editors. 429 pp. Washington, D. C.: National Education Association of U. S., 1961.

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Blaine, G. G., Jr., *Patience and Fortitude: The Parents Guide to Adolescence*. 206 pp. Boston: Little Brown, 1962.

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Sturgis, Somers H., et al. *The Gynecologic Patient*. New York: Grune & Stratton, 1962.

## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

**REPORT OF PRESIDENT  
OF THE HOUSE OF  
THE GOOD SAMARITAN**

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There is little to report on activities of the Board of Managers of the House of the Good Samaritan for the year 1962. Our obligations to The Children's Hospital Medical Center have been fulfilled and the Research Department has carried on with an active program.

It is with real regret that we record the resignation from the Board of Mrs. Chilton R. Cabot, because of ill health. She was for many years an interested, wise, and devoted friend to the Hospital.

Two employees who were pensioned in 1957 have died: Mrs. Sarah G. Hill, for many years the Housekeeper, and Mrs. Sarah L. Still, who came to the Samaritan as Assistant Superintendent to Miss Coleman and continued in that capacity with Miss Hussey. No one fulfilled her position more zealously or more devotedly guarded the traditions of the Hospital.

Rose Dougherty and Ben Liesegang have been pensioned by The Children's Hospital Medical Center. Both gave most willing and devoted service over a long period of years.

It is a satisfaction to realize the continuance of a work started over one hundred years ago, and to note that, with the plans of the C. H. M. C., there are exciting opportunities for the House of the Good Samaritan. May the Managers recognize these opportunities and be ready to meet them so that the Hospital can continue to contribute and share in a necessary work, for service and the welfare of the community.

Margaret A. Revere  
*President*

## HOUSE OF THE GOOD SAMARITAN

# REPORT OF CHIEF OF HOUSE OF THE GOOD SAMARITAN DIVISION

Since the in-patient facilities of the House of the Good Samaritan began to be operated by The Children's Hos-

pital Medical Center in 1958-59, there has been increasing use of the wards, as shown by the following figures:

Total Patients Admitted to All Divisions (71, 72, 73, 74)				
Year	Admitted	Treated	Average Census	Occupancy
1956 - 1957	179	193	25	
1957 - 1958	119	135	18	
1958 - 1959	215	243	37	
1959 - 1960	241	274	39	
1960 - 1961	303	334	32	63.8%
1961 - 1962	336	367	27	68.6%

For the Medical Wards only, excluding Division 71, the Respirator Unit, which is staffed by the Depart-

ment of Orthopedic Surgery, the figures are as follows:

Year	Admitted	Treated	Discharged	Hospital Days	Average Stay
1959 - 1960	204	225	202	10,305	45.7 days
1960 - 1961	243	266	245	8,166	33.6 days
1961 - 1962	256	277	262	8,930	34.5 days

The Medical Wards' average occupancy was 60.5% in 1960-61 and 66.2% in 1961-62.

It is interesting to note how constant the load of rheumatic fever and allied diseases has remained through the years, as is shown by the statistics for the past four years.

It is clear that patients with rheumatic fever and allied diseases make up approximately sixty per cent of the load of medical care on the wards, and, despite the almost total disappearance of cases of recurrent and chronic rheumatic fever that used to fill the House of the Good Samaritan, the number of patients being admitted for the first time with rheumatic fever has not changed very strikingly. The occupancy problems which we have are the direct result of medical progress in treating the disease once it occurs, rather than in progress in eliminating the disease altogether.

The Visiting Staff has not changed during the past year. The fol-

lowing physicians, trainees in Cardiology at The Children's Hospital Medical Center, have served as resident physicians during this past year: Dr. Francis F. Nakamura, Dr. Paul G. Hugenholtz, Dr. Rajendra Tandon, and Dr. Martha A. Carpenter.

Dr. Benedict F. Massell's report will indicate the extent to which the remodeled research laboratories have been increasingly productive under Dr. J. Gabriel Michael's leadership. It is through the activities in laboratories such as these that the final elimination of the threat of rheumatic fever and its consequent heart disease will come. Even though the magnitude of the problem has been diminished by medical progress and good follow-up in clinics such as ours, this disease remains a major scourge of children and young adults in many countries of the world.

Charles A. Janeway, M.D.  
*Chief of House of the  
Good Samaritan Division*



## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

## Patients Discharged with Rheumatic Fever and Allied Diseases

	<u>1958-59</u>	<u>1959-60</u>	<u>1960-61</u>	<u>1961-62</u>
Chorea	11	15	14	10
Rheumatic Fever (with Carditis)	91 (51)	77 (52)	38 (23)	53
Rheumatic Heart Disease	<u>23</u>	<u>26</u>	<u>42</u>	<u>53</u>
Total, Rheumatic Fever and Sequellae	125	118	94	116
Suspected Rheumatic Fever	<u>12</u>	<u>7</u>	<u>3</u>	<u>10</u>
Total, related to Rheumatic Fever	137	125	97	126
Subacute Bacterial Endocarditis	5	4	3	0
Congenital Heart Disease	3	1	5	2
Other Forms of Heart Disease	<u>      </u>	<u>      </u>	<u>2</u>	<u>2</u>
Total, other forms of Heart Disease	8	5	10	4
Post-Streptococcal State				4
Disseminated Lupus Erythematosus	3	4	5	2
Dermatomyositis and other				
Collagen Diseases	4	1	3	1
Rheumatoid Arthritis	<u>8</u>	<u>16</u>	<u>8</u>	<u>17</u>
Total, Collagen Diseases	15	21	16	24
Total Discharged, Rheumatic Fever and Allied Diseases	160	151	123	154

**REPORT OF  
DIRECTOR OF RHEUMATIC  
FEVER RESEARCH UNIT  
AT THE HOUSE OF THE  
GOOD SAMARITAN**

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Disease is a biological phenomenon with broad ramifications, so that problems which at first seem to be concerned specifically with one particular condition are often found to be related to many other conditions. So it is with rheumatic fever. This fact is illustrated by the kinds of studies conducted at the House of the Good Samaritan during the past year. These have been concerned not only with various clinical aspects of rheumatic fever and rheumatic heart disease but also with the genetics of disease susceptibility, the problem of streptococcal infection, specific immunity to disease, non-specific resistance to infection, use and effects of penicillin and other antibiotics, and the problem of penicillin-resistant staphylococci.

Over the past forty years the House of the Good Samaritan has collected a vast store of clinical information on rheumatic fever and rheumatic heart disease, which to a large extent is buried in the records of our patients. Some of this information has already been tapped, but much still remains to be analyzed and evaluated. In order to utilize the available material as effectively as possible, we have begun to apply to our problem some of the newer data-processing methods, and during the past year we recorded selected information from 7,500 patient-admissions on IBM computer cards. Although this initial procedure was designed primarily as a foundation on which other studies could be built, it already is providing a number of interesting facts about the evolving picture of rheumatic fever and the possible influence on it of changing socio-economic conditions, antibiotic prophylaxis, and steroid therapy.

As previous reports have stated, the number of ambulatory patients attending our clinics has been and is steadily increasing. The clinics pro-

vide essential health services for these patients, and the patients in turn, provide a unique source of clinical material for various research studies. Since some of the studies, such as those concerned with the influence of streptococcal infection, of rheumatic fever activity, and of severity of valvular damage on the course of rheumatic heart disease are rather complex, we are developing methods for the recording of data that will allow for the application of computer techniques to the analysis of our clinical material.

One particular project undertaken in connection with the setting up of data-processing methods is concerned with the evaluation of factors influencing the prognosis of aortic regurgitation. Since surgical techniques for the correction of this rheumatic valve lesion are now being rapidly developed, it is expected that our observations on aortic regurgitation will provide a basis for a practical classification of patients that will be helpful in their selection for operation. A preliminary report of this study was recently presented in Mexico City in response to a personal invitation from Doctor Ignacio Chavez, President of the Fourth World Congress of Cardiology.

The genetic study presently under investigation at the House of the Good Samaritan is being done to learn whether rheumatic fever susceptibility is associated with certain blood groups and especially to test the hypothesis that rheumatic susceptibility is linked to the genes determining whether an individual secretes blood group substances into his saliva. The project, which is being done in collaboration with the Blood Grouping Laboratory and the Public Health Service's National Institute of Arthritis and Metabolic Diseases, requires individuals who have had definite rheu-

## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

matic fever or who have definite rheumatic heart disease and who also are married and have children. Since the records of our patients provide excellent documentation of their rheumatic background, our clinic is an unusual source of material for this genetic study.

The Family Program, which was inaugurated in 1953, continues to provide us with abundant data for both clinical and laboratory studies on streptococcal infection. These studies are concerned with the clinical characteristics of streptococcal infection, improvement in methods of diagnosis, the epidemiology of streptococcal infections in families, and the problem of streptococcal immunity. The problem of streptococcal immunity is also being attacked in the laboratory where an investigation of the relation of levels of type-specific antibodies to resistance is making good progress.

Our laboratory studies deal not only with type-specific immunity but also with the intriguing phenomenon of non-specific resistance to infection. Two papers on this latter subject have been published during the past year. In one of the published studies it was shown that the injection into mice of endotoxin, a substance derived from Gram-negative bacteria (such as the typhoid bacillus) will make minute, normally ineffective amounts of type-specific antiserum become highly effective in protecting the animals against virulent streptococci. This enhancement of a specific immune reaction by non-specific stimulation with endotoxin can also be demonstrated in the test tube by comparing the effect on virulent streptococci of whole blood derived from endotoxin-treated rabbits with that of blood from rabbits who have not received endotoxin. The second published report on this subject concerns experiments demonstrating that certain products of Gram-

positive bacteria (such as the group A streptococcus) can induce non-specific resistance to infection that is equal to or even greater than the resistance induced by endotoxin from Gram-negative bacteria.

Our clinical studies with penicillin for the treatment and prevention of streptococcal infection and for the prophylaxis of rheumatic fever have led to laboratory studies dealing with the mechanism by which penicillin affects streptococcal bacteria. In experiments now nearing completion it has been shown that amounts of penicillin that are insufficient to kill streptococci will nevertheless alter the bacteria so that they no longer resemble the original patent strains. Thus, sublethal concentrations of penicillin, acting on the cell wall of the bacteria, cause the organisms to lose their group A carbohydrate substance and their type-specific protein substance, which are the two antigenic components that ordinarily allow us to differentiate strains of streptococci virulent for man from non-virulent strains of streptococci. These altered strains, when grown on blood agar, frequently also lose their typical hemolytic appearance so that they no longer can be distinguished from so-called alpha streptococci, which normally are present in the throats of most healthy persons. However, when these altered streptococci are injected into mice, they then regain their original characteristics, appearing hemolytic on blood agar, and producing abundant amounts of group A carbohydrate and type-specific protein. These laboratory observations not only have basic significance but also have potential clinical implications. Thus, when penicillin treatment seems to eradicate virulent, hemolytic, group A streptococci from the throats of persons who are ill with streptococcal throat infections, we must keep in mind the theoretical possibility

that in some instances the streptococci may have been altered rather than eradicated. Such altered streptococci would not ordinarily be recognized by the usual culture techniques, but conceivably under appropriate conditions the organisms might revert to their original form and thus might again be able to spread to other individuals and to cause disease.

In the course of observations on the prevention of rheumatic fever in our Family Program we occasionally have encountered individuals harboring group A streptococci in their throats in whom penicillin, even when given in large dosage, failed to eradicate the bacteria. This experience at first seemed puzzling since group A streptococci are practically always highly sensitive to the antibacterial action of penicillin. Further investigation suggested that in many instances the failure of penicillin therapy was related to the fact that penicillin-resistant staphylococci were also in the throats of these patients. Such organisms produce penicillinase, which is an enzyme that destroys penicillin. Hence, these penicillinase-producing bacteria might inactivate the penicillin and thereby prevent it from eradicating the group A streptococci.

Because of this experience we are doing a survey to determine how many individuals harbor penicillinase-producing staphylococci in their throats. Results available so far suggest that the number is large. Furthermore, we are investigating methods that possibly may be effective in eradicating or suppressing these penicillinase-producing and penicillin-resistant staphylococci. We are also conducting other laboratory experiments concerned with staphylococci and penicillinase. Thus, our studies on the prevention of rheumatic fever have led us into the problem of penicillin-resistant staphylococci, a problem



which constitutes an important challenge to present-day medicine.

#### Personnel

During the past year the members of the Research Department have been Francisco Amezcua, Jacqueline Amezcua, Gabor Czoniczer, J. Gabriel Michael, T. M. Michael, S. Pelargonio, H. Posada, H. Shrand, George P. Sturgis, and myself.

Many of the studies summarized briefly in this report could not have been done without the modernized laboratories and new equipment made possible by funds allocated by the Managers. For this support, as well as for other financial aid, the members of the Research Department are deeply appreciative and most grateful.

Benedict F. Massell, M. D.  
*Director of Rheumatic Fever  
Research Unit at the House  
of the Good Samaritan.*

#### Publications

Streptococcal Infection. The Need for Improved Recognition and Treatment for the Prevention of Rheumatic Fever. Gabor Czoniczer, Martin Lees, and Benedict F. Massell. *New England Journal of Medicine* 265:951-952 (November 9), 1961.

Factors in the Pathogenesis of Rheumatic Fever: A Study of Streptococcal Infections and Rheumatic Fever Recurrences. Benedict F. Massell. The Journal of the Maine Medical Association, April, 1962 (Special Issue in Honor of Dr. Hans Mautner's 75th Birthday).

Aortic Regurgitation of Rheumatic Origin: Clinical Course and Prognosis. Salvatore Pelargonio, Francisco Amezcua, Gabor Czoniczer, Moshe A. Szabo, and Benedict F. Massell. Paper presented March 12, 1962. In *Proceedings of the New England Cardiovascular Society* 20: 44-45, 1961-1962.

Factors Involved in the Induction of Non-Specific Resistance to Streptococcal Infection in Mice by Endotoxin. J. Gabriel Michael and Benedict F. Massell. *The Journal of Experimental Medicine* 116:101, (July), 1962.

Induction of Non-Specific Resistance to Experimental Streptococcal Infection. J. Gabriel Michael. *Clinical Research* 10:218 (April), 1962.

## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

### REPORT OF NEUROLOGIST-IN-CHIEF

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The personnel of the Neurological Service specifically has included Dr. R. K. Byers, Chief Neurologist, Dr. Richmond S. Paine, Director of the M.I.H. collaborative study and three or four Fellows annually. During the year 1960 to 1961 these consisted of Dr. John Ross, Dr. Peter Berman, and Dr. Robert Pittell. Drs. Ross and Berman continued with a year in neuropathology under Dr. Betty Banker and are now taking a year of adult neurology. Dr. Ross is at the City Hospital under Dr. Denny-Brown and Dr. Berman is at the Massachusetts General under Dr. Raymond Adams. Dr. Pittell is in the practice of pediatrics with emphasis on neurology in Jacksonville, Florida. In 1961-62 the Fellows were Dr. Alberto Abadi, Dr. Arthur Rose, and Dr. Robert Hardman and, in addition, Dr. Desmond Donovan, who was accredited to the M.I.H. project and worked in the Out-Patient Department and the Seizure Unit with us. The Seizure Unit, which was in the past separately organized, is now affiliated with the Neurological Service under Dr. Cesare Lombroso. In addition, we have had two psychologists, Dr. Emma Kraidman and Dr. Dorothy Day, who were accredited to the Department of Psychiatry, working in the Division of Neurology with particular interest in brain damage and its intellectual implications. Miss Diane Livingston has been associated with us as social worker, and her investigations of the family background and facilities for the treatment of patients have been invaluable.

The work of the Fellows has included three to four months with Dr. Lombroso in the Seizure Unit, three to four months with me on the ward with in-patient care of neurological patients, and three to four months working in the Out-Patient Depart-

ment and giving consultations throughout the Hospital for the other Services. During the coming year we are planning to have the rotation amount to three months each and include a period with Dr. Donald Matson.

In June of 1961 I gave two papers at a conference sponsored by the Regional Institute on Neurologically Handicapping Conditions in Children held at the University of California in Berkeley. One was on "Neurologically Handicapping Diseases in Childhood" and the second on "Recent Advances in the Care of Epilepsy." This was part of a symposium on brain-injured children and what might be done about them both medically and educationally, and both talks were published in the Proceedings. This seemed to me a very interesting experience.

Randolph K. Byers, M.D.  
*Acting Neurologist-in-Chief*

**Publications**

- Byers, R. K., M.D., and Betty Banker, M.D., "Infantile Muscular Atrophy," *Archives of Neurology*, Vol. 5, Pages 140 to 164 in August 1961.
- Byers, R. K., M.D., A. B. Bergman, M.D., and M. C. Joseph, M. D., "Steroid Myopathy," *Pediatrics*, Vol. 29, Pages 26 to 36 in January 1962.
- Byers, R. K., M.D., and William T. McLean, M.D., "Etiology and Course of Certain Hemiplegias with Aphasia in Childhood," *Pediatrics*, Vol. 29, Pages 376 to 383, March 1962.



## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

**REPORT OF NEUROSURGEON-  
IN-CHIEF**

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During the year 1961-1962 the Neurosurgical Service has continued to expand its activities, functioning as a community hospital for the routine neurosurgical problems of this area as well as a referral and a consultation service for special surgical problems of the nervous system in children from all other parts of this country and abroad. The Service has continued to function, from a staff and training point of view, in close affiliation with the neurosurgical service of the Peter Bent Brigham Hospital.

With the growth of neurological surgery, and indeed, of pediatric neurological surgery, as independent disciplines, there has been something of a change in the character of this Service at The Children's Hospital Medical Center. Although we continue to act as a community hospital for such common pediatric neurosurgical problems as head and spine injuries, infections, congenital anomalies, and intracranial and spinal tumors, the size of the "community" may be said to have shrunk. The reason for this is the increased number of facilities and the increased number of trained neurological surgeons throughout the New England area. Whereas our unit probably saw a vast majority of all the common pediatric neurosurgical problems in the New England area ten to twenty years ago, there now are at least twenty other neurosurgical units and perhaps sixty neurological surgeons doing this type of work at the present time. This decentralization of clinical material to smaller and smaller communities makes specialized care more quickly and widely available to the general public. At the same time, it brings up certain problems. Many of the advantages of concentration of such material in any one clinic and in any one surgeon's experience are diminished. The lack of concentration of the commoner surgical problems can also be

a handicap in the operation of a teaching program. A university hospital center such as ours tends, in a specialty, to become more and more a referral area for complicated and unusual problems. Indeed, quite a number of our patients are now referred from other neurological and neurosurgical specialists for an additional opinion or for management of particularly difficult and unusual problems. So far, we believe the ratio between unusual and everyday neurosurgical difficulties has been commensurate with a balanced Service and a well rounded training program.

From the point of view of nursing and other supportive care, as well as the special problems which arise in the operating room and out-patient clinic, maintenance of the integrity of a specialized unit devoted to the surgical problems of the nervous system in the child is most important. However, it is equally important, we feel, to insure close continuity with the care of these problems through adolescence and into adult life. Therefore, in the future we would expect to continue, and integrate even more closely in some ways, our affiliations with a neurosurgical unit at the Peter Bent Brigham Hospital or in any Harvard University complex which may develop. Many of the specialized facilities, such as operating room electroencephalography, hypothermia and special x-ray equipment, are appropriate for all age groups. The future of such a combined neurosurgical unit is visualized as serving patients of all ages and providing a well rounded training program, but always with special emphasis on the particular problems of early infancy and the growing child.

In order to allow adequate time for staff surgeons to do thoughtful teaching, make careful scientific observations on their patients, and carry out and record clinical and basic in-

vestigations into new fields, in addition to the daily care of routine clinical problems, it seems wise to plan, for the years to come, for a staff of at least three active neurosurgeons, whose primary concern is with patient care and teaching and in addition, one or two neurosurgeons whose principal base of activity will be in the laboratory. It is not anticipated that the number of in-patients on the Neurosurgical Service in the future will ever greatly exceed the present average of twenty to thirty. The average time of hospital stay is still decreasing and, unless a special unit for the care of long-term problems in rehabilitation is established, the turnover of patients should continue to be relatively rapid.

We anticipate in the future having three or four career trainees in neurosurgery at various levels of experience on the clinical service at any one time. In addition, beginning this year, we have one man from the Neurology Service attached to our Department to gain experience and to aid in the work-up and non-operative aspects of the care of surgical patients. Such a man also serves as a very useful liaison between the two Departments and can thereby be helpful to both. One Surgical House Officer based at the Brigham Hospital works closely with the Service at all times. In addition, a greater part of the year we have one fourth year student from the Harvard Medical School assigned to our Service.

The textbook, *Neurosurgery in Infancy and Childhood*, by Dr. Franc D. Ingraham and myself, first published in 1954, has continued to be in great demand so that a second printing was necessary in 1962. While most of the material in this textbook is still accurate and useful, there are new experiences and new methods which should be recorded. It is estimated that in perhaps three to four years'

time a new edition of this textbook will be undertaken. In addition, I have contributed chapters on pediatric neurosurgical subjects to several other textbooks: *A Textbook of Medicine*, by Cecil & Loeb; *Textbook of Surgery*, by Christopher; *Current Therapy*, 1962, by Conn; and *Tumors of Childhood*, by Ariel & Pack. Chapters have also been written for two new textbooks to be published in the near future: *The New Harvard Textbook of Surgery*, edited by Dr. Richard Warren, to be published early in 1963 and *A Textbook of Pediatric Neurology*, edited by Dr. Thomas Farmer of the University of North Carolina.

We feel one of the important parts of our job is to emphasize to pediatricians and general practitioners the frequent occurrence of surgically treatable lesions of the central nervous system in children and to encourage their earliest possible recognition so that they can be alleviated or cured by proper therapy. An example of this type of problem concerns the neoplasms occurring in childhood within the spinal canal. Although these lesions are not common, they occur with great regularity and there is probably no condition in which the lag between the earliest symptoms and the final establishment of the correct diagnosis is longer. Such a delay, particularly in children with benign, slowly growing, intraspinal tumors, may be tragic indeed to the eventual outcome. It is important therefore, to emphasize that unexplained torticollis, scoliosis, gait disturbance, abdominal pain, disturbances of bowel and bladder function, or queer vascular patterns in the extremities, may indeed be the result of a growing tumor within the spinal canal. An effort is being made, particularly in conjunction with the Orthopedic Department, to improve diagnosis in

this area.

Another important area in education relates to intracranial tumors in childhood. Few physicians, let alone the general public, realize how common these are. Aside from the neoplasms involving the urogenital area, intracranial tumors constitute the largest group of neoplasms in childhood. Because neurological examination in the young child is difficult, because the child does not complain of minor disturbances of function early or in an articulate manner, there is often a long delay again in arrival at the proper diagnosis. Many of the symptoms and signs of brain tumor in young children are very non-specific and not easily differentiated from those of many other more common and transient diseases. It is important, therefore, that pediatricians and general practitioners suspect the possibility of brain tumor on minimal grounds and carry out special diagnostic studies such as radiography of the skull, electroencephalography, lumbar puncture for examination of spinal fluid, and frequently the more elaborate hospital studies of ventriculography and arteriography. If optimum results in treatment are to be obtained, particularly with the more slowly growing, benign, intracranial tumors of childhood (which constitute almost half of the tumors seen on our Service) the earliest possible diagnosis and definitive surgical therapy is imperative.

#### Staff Activities

During this year, Dr. John Garner served as Chief Neurosurgical Resident of the combined Children's Hospital Medical Center and Peter Bent Brigham Hospital Service. This marked the conclusion of his clinical training here and he returned to California to practice. Dr. Francis

## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

Rockett has served during this interval as Senior Neurosurgical Resident. Two men have served for periods of six months each as Junior Neurosurgical Resident: Dr. Ronald DiNella from Vanderbilt University in Nashville, Tennessee, and Dr. Glenn Kindt from the University of Michigan at Ann Arbor. For a period of two months, Dr. Hubert Aronson from Yale University-Hartford Hospital Service attended all the activities of the Neurosurgical Service for postgraduate experience before entering practice in New York City. For a period of one month Dr. David Klein, a graduate of the Massachusetts General Hospital neurosurgical program, did likewise, before beginning a staff position at the University of Buffalo and the Buffalo Children's Hospital.

Because of the large pediatric Neurosurgical unit at the Children's and its reputation over the past twenty-five years, a good many requests are received from other university neurosurgical training programs about the possibility of sending a man to our unit for periods of six months to one year for specialized training in the management of neurosurgical conditions of childhood. This we are not often able to do because of the necessity of carrying our own career Residents through the requirements of a full training program as outlined by the American Board of Neurological Surgery and the Council on Medical Education and Hospitals of the AMA. We do, however, have such men from other programs occasionally and feel that this experience is a valuable one for all concerned. It is a way in which the practices and teachings of this Department can most effectively be passed on to a wider circle of neurosurgeons as these men return to their own units. Thus, during the coming year, we expect to have on our Serv-

ice in training capacities at various levels: Dr. Erich Wisiol from the University of Minnesota; Dr. David Kelly from Bowman Gray School of Medicine in Winston-Salem, North Carolina; and Dr. Ronald Birkenfeld from the Mary Hitchcock Clinic at Dartmouth University.

This past year has been marked by the presence of many visitors from abroad to the Neurosurgical Service. At the time of the International Congress of Neurological Surgery in Washington in October of 1961, we had visitors either before or after the conference from the following countries: England, Scotland, France, Germany, Switzerland, Italy, Spain, Portugal, Norway, Sweden, Finland, Denmark, Holland, Belgium, Australia, India, Pakistan, Mexico, Venezuela, Argentina, Brazil, Peru and South Africa. Of particular interest were the visits of Professor Kristian Kristiansen from Oslo, Norway, who spoke at Grand Rounds on his experience with hypothermia in operations on the central nervous system, and of Mr. Reginald Hooper, neurosurgeon to the Royal Melbourne and Royal Children's Hospitals of Melbourne, Australia, who delivered the annual Blackfan Lecture on the subject of "Occlusive Cerebral Vascular Disease in Childhood."

This year saw Dr. Franc Ingraham make an excellent recovery from his cardiac illness of April, 1961. His presence again in the winter and spring of 1962 at neurosurgical conferences and rounds has been a satisfaction and stimulation to all members of this Service.

Dr. John Shillito this year has continued and expanded his work with cerebral vascular lesions in childhood as a participant in the National Study of Extracranial Arterial Occlusion, sponsored by the Public Health Service. The clinical features of

"strokes" in childhood are being studied intensively by arteriographic, surgical, and pathological techniques. The possibility of applying profound hypothermia and microsurgical techniques to intracranial occlusive vascular disease in children must be further explored. Dr. Shillito has also continued as an active consultant at the West Roxbury Veteran's Hospital and the Pondville Cancer Hospital. Pediatric neurosurgical problems were discussed by Dr. Shillito at staff meetings of the Worcester City Hospital and the Roger Williams General Hospital in Providence, as well as at the annual meeting of the Massachusetts Medical Society.

During the year, I served as Acting Neurosurgeon-in-Chief and participated in the discussions of the Executive and Planning Committees of the Hospital. I served as Professor of Neurosurgery pro tem at the University of California at Los Angeles for one week in February and on my way home from that assignment stopped in Kansas City to deliver the annual Frank Teachenor Memorial Lecture to a combined meeting of the Kansas City Pediatric and Neurosurgical Societies. I continued as secretary of the American Board of Neurological Surgery, and served as a member of two American Medical Association committees of the Council on Medical Education and Hospitals (the Residency Review Committee of Neurosurgery, and the Advisory Council for Medical Specialties). I also served as one of the two neurosurgical members of the Neurological Sciences Training Grant Committee of the National Institute for Neurological Diseases and Blindness of the National Institutes of Health.

We must record here with deep regret the resignation of Dr. Betty Q. Banker as Neuropathologist. She will be sorely missed by all members of



the Neurosurgical Service. Her provocative teaching conferences, her infectious enthusiasm in the investigation of any form of neurological lesion, and her ready and willing cooperation whenever consultation was sought will be difficult indeed to replace.

Society meetings at which papers were presented during the year included: International Congress of Neurological Surgery, Washington, D. C.; American College of Surgeons, Chicago, Illinois; Harvey Cushing Society, Chicago, Illinois; and Massachusetts Medical Society, Boston. Other meetings attended by staff members included: Society of Neurological Surgeons, Minneapolis; Congress of Neurological Surgeons, New York; American Surgical Association, Washington; Association for Research in Nervous and Mental Disease, Washington; Neurosurgical Society of America, Biloxi, Mississippi; New England Surgical Society; and Study Section of Extracranial Arterial Occlusions of the Public Health Service, Washington, D. C.

#### Neurosurgical Research Laboratory

The Neurosurgical Research Laboratory has continued under the direction of Dr. Edgar A. Bering, Jr. He has had generous support from the Muscular Dystrophy Foundation and research grants from the National Institute of Neurological Diseases and Blindness of the NIH. In addition, support of various activities of the Research Laboratory, as well as other work of the Department, has come from the Kent Fund. The generosity of the many donors to this fund is gratefully acknowledged.

During the period of this report, there were two Fellows working in the Laboratory with Dr. Bering: Dr. Carl H. Sutton from July 1, 1961 to

February 28, 1962, and Dr. Osamu Sato from July 1, 1961 through June 30, 1962. Dr. Sutton was on a fellowship from the Cancer Institute of the National Institutes of Health, working on growing human neural tumors in animals. Dr. Sato is spending his last two years in this country on an extended period of experimental study before he returns to Japan to complete his work for a Doctor of Science Degree and to continue in the practice of neurosurgery.

Research was carried out in three major areas during the year: first, the study of the growth of human neural tumors in animals; second, the study of the physiology of profound hypothermia; and third, the study of the physiology of cerebrospinal fluid.

Four different types of neural tumors have been transplanted and grown in guinea pig eyes from specimens taken at operation. Two of these have been confirmed histologically and have been passed through two generations of animals. The others are still in the first generation and await histological confirmation of growth.

The work on the physiology of hypothermia has been centered chiefly around the technical problems of extracorporeal circulation and total body cooling, trying to develop ways of getting higher blood flows and faster cooling rates. The use of various blood substitutes such as Dextran and plasma diluents has been investigated. The studies demonstrated that these diluents allow much faster circulation in the extracorporeal system, but cooling rates were increased only in the viscera and not in the limbs or the head. The circulation of the head can be improved by increasing the blood  $\text{CO}_2$ , but this creates many foaming problems in the pumping unit and is not, at the present time, considered desirable. Work is being carried out to study the mechanism of the blood

shunt in the body. Considerable attention has also been given to the problem of the pressure in the left heart if a closed by-pass pump system is used, cannulating only one artery and the vena cava. It was felt from the preliminary observations that the pressure in the right heart may be of some importance in re-starting the heart on warming. These studies have been carried out in conjunction with the Department of Surgery. Safe cessation of all circulation to the head to allow for surgical attack on cerebro-vascular lesions is a goal of this type of research.

The work on cerebrospinal fluid physiology has been concerned with explanation of the forces causing ventricular enlargement in hydrocephalus. These studies, which have been going on for the past several years, have demonstrated that the force causing ventricular enlargement does not come from the back pressure of obstructed cerebrospinal circulation, but rather from the pulse pressure generated by the choroid plexus within the ventricle as it fills with blood. This is a new concept and implies that the interpretation of other data must be re-evaluated. Further studies have been carried out on the formation and absorption of cerebrospinal fluid using the techniques of ventricular perfusion which recently have been developed in this country and abroad. These studies, while in their preliminary state, suggest that there is considerable absorption of fluid within the ventricular system itself, as well as in the sub-arachnoid space.

Dr. Bering attended a special conference on the use of computers in biological investigation which was conducted at the Massachusetts Institute of Technology this year. This conference, sponsored by the National Science Foundation, was given to twelve scientists whose chief interests

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were in problems of neurology. It is expected that the newer techniques soon will be brought to the laboratory.

Donald D. Matson, M.D.  
*Acting Neurosurgeon-in-Chief*

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### REPORT OF ORTHOPEDIC SURGEON-IN-CHIEF

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The years 1960-61 and 1961-62 have been busy and productive. The number of cases in the general Orthopedic Clinics, in fact, showed a minor decrease from the 1959-60 figures, but this decrease reflects an increasing percentage of patients in the orthopedic offices of the Hospital. The loss in the general clinics is made up many times by the increasing number seen in these areas.

The in-patient figures for the orthopedic wards show a fairly uniform figure over the last three years. Those of 1961-62 showed a five per cent gain over the preceding year. The occupancy rate during this period was eighty-two per cent. This cannot be called capacity and there are many factors other than demand entering into occupancy figures. Our orthopedic wards are made up largely of rooms with several beds. When patients have infections or infectious diseases, for example, isolation techniques necessarily reduce the number of beds available. Seasonal variation in the admission of orthopedic elective procedures occurs. It is difficult for a family to have their child miss the first part of the school year when the procedure is such that it could be done just as well in the summer. In fact, the first part of the school year is the worst time for a child to be out of school. However, with teachers available in the Hospital and better provision for home teaching, we are better able to get over this hurdle, but it is a real factor in the scheduling of admissions. During the summer our orthopedic wards are often filled to overflowing with patients located in other wards and in the Good Samaritan convalescent area. This fact is not reflected in the census figures assigned to our Service, since only the figures for the patients on the orthopedic wards are given. A further factor entering into the lowering of

occupancy figures is the reduced population over a weekend when all the Services of the Hospital are greatly reduced. It is well to state in connection with this that the Orthopedic Out-Patient Department runs on Saturdays.

#### Teaching

All third year medical students at Harvard Medical School receive instruction in our Department amounting to forty-five hours for each student. This occurs in sections throughout the school year for periods slightly over five weeks. A full section is about twenty-five students, but most of the instruction is given in small subsections. The use of these smaller groups makes instruction more effective, but it does require more instructional hours and makes an increasing demand upon the Staff. Other teaching activities of the Medical School affect fourth year elective students and graduate students enrolled in the courses for graduates.

Responsibilities in teaching include those of the physical therapy program of Simmons College in which our Chief of Service is Director and Miss Shirley Cogland, head of our Physical Therapy Department, is Technical Director. Many of our Staff participate in instruction in this program, as do members of other Departments. The relation to Simmons College in this program greatly strengthens our position in physical therapy.

#### Residents

Our residency training program is one of our valuable assets and treasured responsibilities. Our program, which is a combined one with the Massachusetts General Hospital, Peter Bent Brigham Hospital, and related hospitals, has a very distinguished rating amongst residency programs in orthopedic surgery. The number of applicants are many and we are most fortunate in their qual-



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ity. The residency is a three and one-half year program in which the men spend their first year at The Children's

Hospital Medical Center, the second year at the Massachusetts General Hospital, the first six months of their third

year at Children's, and in the last year one-half of the men finish in rotation at the Peter Bent Brigham, and end up either as Chief Resident here at Children's or at the West Roxbury Veterans Hospital. The other half finish their residency under the auspices of the Massachusetts General Hospital. The Residents during this period are listed on this page.

### Staff

I am convinced that our Staff of orthopedic surgeons works just a little harder than any group should. I pay tribute to their conscientious industry, their excellent care of patients, and their contributions to orthopedic surgery in general.

The members of our orthopedic Staff are responsible not only for the care of patients and for teaching and research here but also for the teaching of orthopedic surgery at the Peter Bent Brigham Hospital, and for the conduct of the clinical services there and at the West Roxbury Veterans Hospital — all of which results in a very busy interwoven closely knit schedule of activities.

The Staff of a teaching hospital such as ours has many duties and responsibilities which on the surface do not immediately seem to be a part of hospital activities but which in reality reflect directly upon their responsibilities. For one thing, they must represent the hospital in local medical circles and in meeting places in the surrounding New England area, and they must represent the hospital and the medical school at national and international levels. Some of these local activities may be illustrated: for example, Dr. Arthur W. Trott discussed "Painful Joints in Children" at the Noble Community Hospital in Westfield, Massachusetts, in January of 1962, as a part of the Postgraduate Assembly of the Massachusetts Medical

Charles F. Heinig	Chief Resident	7/1/60 - 3/31/61
John J. Monahan	Assistant Resident	7/1/60 - 6/30/61
	Resident	7/1/62 - 12/31/62
James G. Manson	Assistant Resident	7/1/60 - 6/30/61
	Resident	7/1/62 - 12/31/62
David Glazer	Resident	7/1/60 - 9/30/60
		7/1/61 - 3/31/62
James P. Zettas	Junior Resident	7/1/60 - 3/31/61
	Chief Resident	4/1/61 - 9/30/61
Edwin J. Madden	Junior Resident	7/1/60 - 12/31/60
Richard Senghas	Junior Resident	7/1/60 - 12/31/60
Seymour Zimblor	Assistant Resident	
	(in Orthopedic Lab.)	7/1/60 - 12/31/60
	Assistant Resident	1/1/61 - 12/31/61
Arthur Pappas	Assistant Resident	
	(in Orthopedic Lab.)	7/1/60 - 12/31/60
	Assistant Resident	4/1/61 - 3/31/62
	Assistant Resident	7/1/61 - 6/30/62
Hugh P. Chandler	Assistant Resident	10/1/60 - 9/30/61
Gordon F. Lupien	Assistant Resident	10/1/60 - 9/30/61
James Eldredge	Junior Resident	10/1/60 - 3/31/61
	Chief Resident	10/1/61 - 6/30/62
William E. Wilson	Junior Resident	10/1/60 - 3/31/61
Khalil Germanos	Assistant Resident	1/1/61 - 12/31/61
John B. McGinty	Junior Resident	1/1/61 - 6/30/61
Lawrence Leonard	Junior Resident	1/1/61 - 6/30/61
Bernard David Grant	Junior Resident	4/1/61 - 9/30/61
		(also 4/1/60 - 9/30/60)
Marvin Weinfeld	Resident	4/1/61 - 9/30/61
Walid Mnaymneh	Resident	4/1/61 - 9/30/61
William G. Stewart, Jr.	Assistant Resident	5/16/61 - 3/31/62
Richard Eaton	Resident	7/1/61 - 12/31/61
	Chief Resident	7/1/62 - 12/31/62
Dudley Baker	Resident	7/1/61 - 12/31/61
Edgar B. Thompson, III	Assistant Resident	7/1/61 - 6/30/62
William C. Bostic, III	Assistant Resident	7/1/61 - 6/30/62
Gerald Kenner	Resident	10/1/61 - 3/31/62
David C. Mitchell	Resident	10/1/61 - 3/31/62
Richard E. Conway	Assistant Resident	10/1/61 - 9/30/62
Lynn L. Ault	Assistant Resident	10/1/61 - 9/30/62
Felix A. Battat	Resident	1/1/62 - 6/30/62
Clement Sledge	Resident	1/1/62 - 6/30/62
Stuart H. Harris, Jr.	Assistant Resident	1/1/62 - 12/31/62
Robert J. Boyd	Assistant Resident	1/1/62 - 12/31/62
Christopher Isensee	Resident	5/1/62 - 9/30/62
		4/1/63 - 6/30/63
Henry D. Wilde, Jr.	Resident	4/1/62 - 9/30/62
Maureen Molloy	Resident	4/1/62 - 9/30/62
Robert A. First	Assistant Resident	4/1/62 - 3/31/62
Arnold Kisch	Assistant Resident	4/1/62 - 3/31/62
Robert C. Runyon	Assistant Resident	7/1/62 - 6/30/63
Kirby L. C. vonKester	Assistant Resident	7/1/62 - 6/30/63

Society. He served on the Medical Advisory Committee of the Norfolk County Chapter of the National Foundation. Dr. Henry H. Banks discussed "Fractures of the Neck of the Femur of the Aged" at the New England Postgraduate Assembly here in Boston in November 1961. Dr. Paul P. Griffin spoke to the Staff of the Roger Williams Hospital in Providence, Rhode Island, on "Scoliosis" in November of 1961. Dr. Mihran O. Tachdjian discussed "Fractures of the Neck of the Femur in Children" at the April 1962 meeting of the State Trauma Committee of the American College of Surgeons here in Boston at the Hotel Statler. The orthopedic surgeons of the Staff entertained the Russell Hibbs Society, made up of orthopedic surgeons from all over the United States, here in the Jimmy Fund Amphitheater April 12, 1962, with a succession of papers and demonstrations. I presented a clinic in pediatric orthopedics at the Augusta General Hospital, Augusta, Maine, August 4, 1961. These represent a sampling of the types of activities which are in frequent demand.

On the national level, many of the members of our Staff served on important committees. Dr. Banks is now Chairman of the Committee of the American Academy for Cerebral Palsy on Evaluation of Treatment in Cerebral Palsy, and is a member of the Committee on Scientific Exhibits of the American Academy of Orthopaedic Surgeons. Dr. Jonathan Cohen serves on several committees of the American Academy of Orthopaedic Surgeons, including the Committee on Biomechanics and Implants; the Committee on Scientific Investigation, of which he is Chairman; the Committee on Pathology; and the Committee on Graduate Education. He is Assistant Editor of the *Journal of Bone and Joint Surgery* and President-Elect of the Orthopaedic

Research Society. I was Chairman of the Committee on Graduate Education of the American Academy of Orthopaedic Surgeons, am a member of the Advisory Council for Orthopaedic Surgery and Governor of the American College of Surgeons, a member of the Committee on the Handicapped Child of the American Academy of Pediatrics, a member of the Clinical Advisory Committee of United Cerebral Palsy, Chairman of the Nominating Committee of the American Academy of Orthopaedic Surgeons for January 1962, a member of the Advisory Committee of the Office of Vocational Rehabilitation, and Consultant to the Crippled Children's Program of Massachusetts.

Many of our Staff presented papers, gave instructional courses, and otherwise participated in national programs. Dr. Griffin, along with Dr. Tachdjian, presented a scientific exhibit at the American Academy of Orthopaedic Surgeons meeting in January 1962 on "Pauci-articular Arthritis in Children," and read a paper on the same subject at the meeting of the American Medical Association in June 1962. Dr. Tachdjian was co-author of a motion picture presentation and movie on cerebral palsy at the meeting of the American Academy for Cerebral Palsy in St. Louis in October 1961, and read a paper on "Intermetacarpal Bone Block for Thenar Paralysis" at the meeting of the American Orthopaedic Association in May 1962. Dr. Banks has read papers at the last two meetings of the American Academy of Orthopaedic Surgeons and of the American Academy for Cerebral Palsy, as have I. I gave Instructional Courses at the 1961 and 1962 meetings of the American Academy of Orthopaedic Surgeons, along with Miss Margaret Anderson, and participated in a Symposium on "Congenital Dislocation of

the Hip in Childhood." I was the invited guest of the Georgia Orthopaedic Society at their annual meeting in Sea Island, Georgia, presenting a paper on "The Hip in Childhood and Some of Its Problems," was a Visiting Professor of Orthopaedic Surgery at the University of Miami School of Medicine from March 5 to 9, 1962, giving the Arthur Weiland Lecture, and was the first Samuel Higby Camp Visiting Professor of Orthopaedic Surgery at the University of Illinois, April 9 to 14, 1962.

These are listed to illustrate the breadth of activities which make up the daily lives of our Staff and reflect upon the reputation and standing of our Hospital. All of these activities contribute to the face of the Orthopaedic Service of The Children's Hospital Medical Center.

### Research

Research in our Department is in an expanding phase. The interests are reflected in part by the papers from the Department. Dr. Jonathan Cohen has been studying the many facets of the problems of the reactions of the body to metals and of the reaction of metals to implants in the human body. With the increasing use of prostheses and of metals introduced within the body, the value of these investigations becomes more and more impressive. Other areas of Dr. Cohen's interest have included the performance of bone when it is implanted in grafts and of the effects of radiation on bone and on its growth. Dr. Arthur Pappas is associated in these latter studies. Dr. Banks has been involved with the comprehensive study of the hip in the adult and, in particular, with the factors contributing to non-union and aseptic necrosis of the head of the femur after fracture. He has been concerned with the healing of bone and the factors influencing it, including nutritional

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and metabolic factors. Dr. Banks is also participating, along with Dr. Tachdjian and me, in a study of the effectiveness of various surgical measures in cerebral palsy. Dr. Griffin has had particular interests during this period in the study of pauci-articular arthritis in children, septic joints in the child, and bone tumors. Dr. Tachdjian, along with Dr. Banks and other associates, has been concerned with developing an objective method of recording motor performance in cerebral palsy. His other activities include a study of fractures of the neck of the femur in the child, and the orthopedic manifestations of spinal cord tumors. Dr. Tachdjian assisted me in writing the orthopedic section of a textbook on surgery soon to be published. Dr. Trott continued his interest in the circulation of the extremities as related to growth in paralytic disease, in the rehabilitation of severely paralyzed patients, including respiratory paralysis, and in the treatment of paralytic valgus feet. He includes in his interests the relation of progressive scoliosis to increasing pulmonary deficit.

The Growth Study is a particular interest of mine where I am ably assisted by Research Associate Margaret Anderson and Research Assistant Marie Blais Messner. Particular areas of activity during this period include analytical studies of the growth of bone in children and the growth modified by surgery, further refinements of the tables of prediction of growth, study of the effects of trauma to the epiphysis on growth, a longitudinal study of the stimulation of growth arising from fractures of the shafts of long bones in the lower extremities, and a study of the abnormalities of growth which produce deformity of the hip and upper end of the femur. The Growth Study represents a major activity not only in

research but in the care of patients as well. In 1961, for example, 1,351 patients were observed in a study representing 2,072 visits for study and evaluation. I have been concerned with developing and evaluating various surgical procedures concerned with the rehabilitation of the crippled child.

We are indebted to numerous sources for the support of these researches, in addition to those individuals who have contributed so generously to the support of our Department. The Growth Study is supported in part by a U. S. Public Health Grant and by Noemi U.O.T.S. The work of Dr. Cohen is supported in large part by a U. S. Public Health Grant and by the Orthopedic Research and Education Foundation. The work in cerebral palsy is aided by the United Cerebral Palsy Foundation, and Dr. Banks' work affecting the hip has been aided by a U. S. Public Health Grant and more recently by the Orthopedic Research and Education Foundation, and by the National Society for Crippled Children and Adults. The activities of the Respiratory and Rehabilitation Unit have been assisted by the National Foundation. I would like to acknowledge the generosity of the Children's Cancer Research Foundation and Dr. Sidney Farber in providing orthopedic research space in the Jimmy Fund Building.

### The Peabody Professorship

In our last Annual Report the need for an endowed chair of Orthopedic Surgery at The Children's Hospital Medical Center was emphasized. It is now becoming a reality. The Trustees of the New England Peabody Home have made a gift of \$1,000,000 to Harvard University to establish "The Harriet M. Peabody Fund" to be used "to advance the care and treatment of children, to seek the cause of crippling disease, and to spread the benefits of its

discoveries through the teaching and research programs of Harvard Medical School." This gift made possible the establishment of the Harriet M. Peabody Professorship. In addition, the Peabody Trustees voted that other funds be given to The Children's Hospital to permit Children's to establish the Peabody Clinic for Crippled Children. In discussing this Professorship, Dr. George P. Berry, Dean of the Faculty of Medicine of Harvard, stated that "this appointment will bring into being for the first time a full-time Department of Orthopedics at Harvard Medical School and The Children's Hospital. Together with the establishment of the Peabody Clinic, there will be provided a focal point for the continuous interest and support of the dedicated Trustees and friends of the Peabody Home." It has been my good fortune to be appointed as the first incumbent of this Chair, effective July 1, 1962.

The establishment of this Chair should, over the years, add great strength to The Children's Hospital Medical Center and to orthopedic surgery. The Peabody Trustees have chosen this way to carry on their work and interest in the solution of the problems of the crippled child. The Board of the Peabody Home for Crippled Children continues its activities and, according to Mr. Thorwald S. Paulsen, it "will, from time to time, make grants for the care and improvement of crippled children." We wish to acknowledge our gratefulness to the Board of Trustees of the Peabody Home for this magnificent benefaction to the Hospital, the Medical School, and the Department of Orthopedic Surgery.

### The Mary MacArthur Memorial Respiratory Unit

The Mary MacArthur Memorial Respiratory Unit, in addition to serving as the headquarters of patients who



have come in with respiratory paralysis and as a rehabilitation unit for severe paralytic diseases, acts as the center of a home care program for patients with respiratory poliomyelitis. This involves, among other activities, the checking and repairing of the respirator equipment of 132 patients scattered throughout New England. The actual number of respirator patients has greatly decreased but patients in the respirator form a small proportion of those hospitalized in the area. The Unit is gradually being converted into a rehabilitation unit for severely crippled children.

#### Plans for the Future

Our orthopedic wards in the Farley Building please us more and more as time goes on. Arrangements by which the units are graduated by age; the emphasis on multiple bed units with larger sized units for the young and on four-bed and two-bed accommodations for older children, with some single units; provision of adequate space in each unit to permit effective teaching rounds and the easy handling of orthopedic beds and orthopedic cases — all of these contribute to an effective unit. In contrast to this is the fact that our facilities for out-patient services are poorly arranged, unattractive, and crowded and present a poor introduction for patients to our Hospital. We emphasized in our last report that the out-patient clinic is where a hospital meets a large part of its public and is the site of first contact of the patient with the hospital.

Ambulatory services are becoming a larger and larger part of Hospital activities. To meet these demands a new ambulatory clinic seems most important if the Hospital is to move ahead. The plans of such a facility should consider not only the current techniques of delivering medical services but should be such as to be adapt-

able to changing patterns of delivering medical care as they evolve. In planning an orthopedic and rehabilitation unit, it must be adequate in size, closely related to physical therapy and other services related to rehabilitation, should provide for orthopedic Staff offices related to the out-patient and examining areas, should be in close proximity to the Radiology Department, and should have a vocational evaluation, guidance, and testing area which is available to the out-patient, to house patients, and to day patients.

Research space is another immediate need of our Department. A major part of our research area is borrowed space from the Children's Cancer Research Foundation. The establishment by the Harvard Medical School of the Peabody Professorship and its related support emphasizes the importance of our needs in this area. Further basic support will be provided by the Frank R. Ober Research Fund and other funds which have come to the Department. Research must play an expanding part in our plans and activities.

The plan for a clinic and research building located between Building A and the Farley Building has much appeal. It would appear to be the most effective arrangement to provide comprehensive care for the child. It would provide close physical relation of the out-patient and clinical research area with the existing in-patient unit and would permit the efficient location and distribution of services for both units. It would present a new face for the entrance of patients to the Hospital, which should add immeasurably to our strength.

Our Department envisages an expanding Staff. We are in a position of change which cannot be made suddenly. In expanding the Staff it must be recognized that the future of ortho-

pedic surgery here at Children's depends upon "specialists" in particular areas of pediatric orthopedic surgery contributing to the field, developing new methods, and providing services which are not generally available. It must be prepared to give superior clinical care and consultation services in all areas of clinical orthopedics and rehabilitation.

I wish finally to thank all those who have made gifts to the Department during these two years, to express my admiration and appreciation for the efforts of the Orthopedic Staff, the Residents, Nursing, Physical Therapy, the secretaries of the Department, and my thanks for the support of the Trustees and Administration in all of its ramifications.

William T. Green, M.D.  
*Orthopedic Surgeon-in-Chief*

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## Publications

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## CHAIRMAN, DIVISION OF LABORATORIES AND RESEARCH

### REPORT OF CHAIRMAN, DIVISION OF LABORATORIES AND RESEARCH

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This Division consists of the Department of Pathology, the Laboratories of Clinical Pathology, and the Research Division of Infectious Disease. It is closely allied by historical development and common Chairmanship with the Children's Cancer Research Foundation, and acts as a connecting link between The Children's Hospital Medical Center and the Foundation. This report will present recent facts and accomplishments of the several parts of the Division of Laboratories and Research, placed in historical setting. Justification for a brief backward look is found in the fact that more than thirty-five years have elapsed since I first joined the Staff of The Children's Hospital. It was August, 1927, when I was appointed by Dr. S. Burt Wolbach to develop a Department of Pathology at The Children's Hospital. In addition to this professional association, I have had the opportunity from 1931 to the present, first as Secretary to the Staff Executive and Planning Committees, and then as Chairman of the Committee for the Planning of The Children's Medical Center, to participate in the creation of plans for the expansion of The Children's Hospital, first into a complete general hospital for children and then, in 1946, to a medical center for children. This has been a voluntary assignment with no administrative duties. This preoccupation with the plans for the development of The Children's Medical Center and the related activities in medical planning on the national and international scene, in both voluntary and governmental agencies, have constituted through these years an *avocation* which has brought a measure of deep satisfaction, as well as frustration, fulfillment of many dreams, and, above all, an ever increasing opportunity to make an added contribution to the fields with which my professional life has been concerned: teaching, the care

of the patient, and the cure and prevention of disease through research. Under the wise and courageous leadership of the late President of the Board of Trustees, J. Wells Farley, the plans of the Staff, fashioned during the decade before World War II, were translated into actual accomplishments by the enthusiastic labors of a large number of lay and professional people who were devoted to The Children's Hospital. Dreams must precede plans, and actual accomplishments should precede dreams, if there is to be a solid foundation for new structures. Dreams usually out-distance the fulfillment of plans, and so we find under contemplation today, on drawing boards, fashioned by Committees of our President, Mr. Wolbach, and the new General Director, Dr. Cronkhite, sketches and blueprints giving promise of life to ideas conceived many years before and stored against the day when fiscal considerations would permit their translation into reality. To the President and Trustees and to the new General Director go the greetings and good wishes of the members of the Staff of this Division and their confidence that solutions will be found for the problems of economic nature which have troubled hospitals everywhere.

A Department of Pathology of The Children's Hospital was mentioned officially for the first time in 1879, ten years after the opening of the Hospital, but it had no recognizable form within the Hospital for many years. Dr. Wolbach gave his services from the Harvard Medical School from 1915 until 1924, when a small laboratory was organized in the basement below the old operating room to house a Resident and technician. Dr. Wolbach's invaluable contributions to The Children's Hospital continued until his death in 1954.

One of the first steps in the expansion of the Hospital into The



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Children's Medical Center was the approval by the Board of Trustees of our plan for a Division of Laboratories and Research which was officially inaugurated July 1, 1946. The first unit to be included in this new division was the *Pathology Department*. This had been organized in 1927 on the premise that its primary responsibility was to conduct routine studies in post mortem and surgical pathology of a caliber usually associated with special research endeavors. Several hundred bound volumes of post mortem and surgical studies carried out in scholarly fashion record the observations of the few hundred men-in-training and their mentors in a manner so detailed and accurate that they have served as the basis and inspiration for large numbers of publications from the many Divisions of the Hospital since 1927. We are proud that they have served, too, as the background and as part of the substance of textbooks and monographs written by members of the several clinical divisions of the Hospital.

With its routine responsibilities carried out on such a high plane, the Department was able to devote, at the same time, energy to the education of pathologists and of clinicians who spent periods of training from six months to two years in the laboratory of pathology or in the performance of their own research in experimental pathology. The first four years of my service in the Department were spent in the basement below the operating rooms of the old Hospital, in quarters painfully inadequate for the task. Much finer quarters were provided in 1931 and this is where the Department is housed at present. The space, expertly designed for the purpose in 1931, has been outgrown for many years.

The character of the Department

in its early years is illustrated best by the fact that as many as eighteen separate research programs were carried out at one time on a part-time basis by members of other Departments in the Hospital in collaboration with the Staff of the Department of Pathology. Of particular interest was the first of these in 1927. This was a project of importance to Dr. Robert Osgood and Dr. Frank R. Ober, carried out by Dr. Calvin Page with my aid, and had to do with the control of osteomyelitis by maggots. This marked the beginning of an active twenty-year collaboration between Dr. Ober and myself in the creation of plans for the development of orthopedic research, culminating in the establishment of the Frank R. Ober Fund for Orthopedic Research and arrangements for the eventual strengthening of this fund from Dr. Ober's own estate.

Through these years we have had the privilege of working intimately in the development of the Department of Orthopedic Surgery, sharing our space and equipment in much of its experimental activities. From 1930, when Dr. Ober brought Dr. William T. Green to The Children's Hospital, most of this collaboration has been with Dr. Green or in association with him and a whole series of orthopedic Residents who spent part of their time in the Department of Pathology.

The great need for an expanded research program in orthopedic surgery and the promise of developments in this field as demonstrated by Dr. Green and his colleagues weighed heavily in the decision of the Staff Planning Committee and the Staff Executive Committee to recommend to the Trustees of The Children's Hospital, and to the Trustees of the New England Peabody Home, that our Department of Orthopedic Surgery be chosen as the recipient of funds

from the New England Peabody Home. With this support, Harvard Medical School under Dean George P. Berry, in agreement with our Trustees under Mr. Wolbach, established the first full professorship of orthopedic surgery in our history. Dr. Green became, in July 1962, the first Harriet M. Peabody Professor of Orthopedic Surgery at The Children's Hospital. It was particularly pleasant to participate in these happy decisions after thirty-five years of deep personal interest in and association with the development of orthopedic research in this Hospital. We are looking ahead to the rapid growth of these activities during the next few years under Dr. Green and his colleagues.

The role of the Department of Pathology is well illustrated in the solid foundation of careful anatomical studies on congenital heart disease which gave to the brilliant surgery of Dr. Robert E. Gross the necessary foundation on which to base diagnosis and create new surgical attacks on previously incurable heart disease. This was before the day of such modern diagnostic methods as those used so effectively by Dr. Alexander Nadas. The wealth of post mortem observations thus constituted a background for both surgical and medical aspects of congenital heart disease in children, and served as a fitting jumping-off point for the extraordinary developments by others in diagnosis, treatment, and now prevention of congenital malformations.

A similar contribution of basic information completely essential for further clinical and physiological studies was made in the studies on the pathology of the newborn and the premature infant. Direct application of what was learned in the post mortem room resulted in the saving of large numbers of both premature and

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full term babies. The important contributions to our knowledge of the newborn by Dr. Clement Smith and his colleagues grew out of these initial studies and collaborative investigations, which they then developed into a major field of pathologic physiology of its own, here and more so at the Boston Lying-in Hospital, in what has become a renowned laboratory of newborn physiology and clinical investigation.

Similar contributions could be mentioned to the clinical disciplines of neurosurgery, endocrinology, radiology and radiotherapy, renal and metabolic disease, hematology, and many other fields of activity represented today in The Children's Hospital Medical Center. This is the function of any good Department of Pathology which recognizes that although it has complete freedom to carry out its own research without restriction as to subject matter, techniques employed, or kinds of collaboration, it should act also as assistant and consultant, both in routine and investigative problems, to other members of the Hospital Staff. Because of its unique position in the Hospital community, it has a magnificent opportunity to play an important role in the teaching of medical students, Interns, Residents, and older doctors as part of their continuing education. And this it has done in an enthusiastic and effective manner through these years.

Inevitably growing out of such a conception is the crossing of lines of disciplines and departments in behalf of the patient or in the solution of problems of basic or applied research. This can and should be done without interference to the growth of individuals or departments. The team concept has been developed to a high point during the last fifteen years, but was recognizable in our daily work before 1930. The Division of Labora-

tories and Research was therefore a logical development. We described it originally in terms of the utilization of the techniques of biology, chemistry, and physics applied to the various laboratory disciplines basic to medicine, surgery, and pathology for the solution of mental and physical problems concerned with the normal and the sick infant, child, and adolescent. This original description called for the provision of expert professional assistance by the members in this new Division to the research programs originated in and conducted by the several clinical departments of the Hospital.

One part of this plan called for the grouping together of all of the routine clinical laboratories then scattered throughout the Hospital into one *department of clinical laboratories*, headed by a man of competence with his professional associates who could give supervision of a caliber not possible before. Since its inception in 1946 the *Laboratories of Clinical Pathology* have been under the supervision of Dr. Harry Shwachman, who has contributed to the high level of care of our patients, in addition to adding to an important degree to the Hospital income. Because of circumstances that will not be discussed further here, the full plan for the Division of Laboratories and Research was not carried out. In small part this is explained by the pattern of the development of research in the several clinical departments. But far more important, the time was not yet ripe for the creation of proper facilities and the provision of appropriate support by the Hospital. The need for research space is indeed today still a pressing need equaled only by that for space for ambulatory and administrative services.

Three new research departments of the Division of Laboratories and Research were added in 1947 and one

of these remains. The first was a Laboratory of Biochemistry, under a professional biochemist. This lasted but a short time. This deficiency was replaced by a far greater development in chemistry in the Children's Cancer Research Foundation. The second, the Division of Nutritional Research, was created for Dr. S. Burt Wolbach on his retirement from the Shattuck Professorship at Harvard Medical School in 1948, to permit him to continue his epoch-making contributions to our knowledge of vitamin deficiency states. This Division continued until Dr. Wolbach's death in 1954. The third, the Research Division of Infectious Disease, with Dr. John F. Enders as the first Chief in 1947, has had a brilliant history. Dr. Enders is still its Chief, although his Harvard appointment was altered when he became a University Professor. He retains his quarters in the old Carnegie Building and has also occupied the much larger space in the Jimmy Fund Building of the Children's Cancer Research Foundation since it was dedicated in January, 1952. In the Foundation, Dr. Enders holds the title of Chief of the Virus Research Laboratories and in this capacity investigates the relationship of viruses to cancer.

All of the other basic science divisions conceived in the original plan when the Division of Laboratories and Research was created as a first step toward the building of an Institute of Pediatric Research, have developed in the Children's Cancer Research Foundation which was founded in 1948 as an affiliate of The Children's Hospital Medical Center. The members of the staff of the Foundation hold appointments for the most part in the Department of Pathology or in appropriate clinical departments in the Hospital.

The clinical and laboratory research activities of the Children's



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Cancer Research Foundation will not be discussed further in this report except for a simple listing of areas of chief interest. The laboratory divisions include: biochemistry, enzyme chemistry, organic chemistry, biophysics including crystallography, virology, tissue culture, genetics, cell biology, experimental hematology and pathology, tissue ultrastructure, molecular biology, carcinogenesis, ultraviolet photometric methodology, pharmacology and pharmacodynamics, cancer chemotherapy, tissue and organ transplantation, and immunology. The largest single program concerns the search for chemical agents for the control of cancer; their synthesis, mechanism of action, toxicity, pharmacological behavior, and application to the patient with disseminated cancer. The publications of the Foundation are included in the general bibliography of the Division of Laboratories and Research. The Foundation makes available to the Staff of The Children's Hospital Medical Center a large number of experts in many scientific disciplines. Our tumor therapy group, under my immediate direction and including representatives of the several clinical and laboratory divisions of the Hospital, is responsible for the care and study of the largest number of children with acute leukemia and other forms of disseminated cancer gathered in any one institution in the world. It collaborates in a very effective program with the clinical staff of the Hospital in behalf of those patients requiring care in The Children's Hospital. Here is a splendid example of important collaboration by two institutions joined together in an affiliation but financially independent.

Two important developments in the Harvard Medical School are attributable to members of the Foundation staff who have held research titles in our Department of Pathology. The first former member of the Foundation

and the Department of Pathology to achieve recognition was the late Dr. L. Lahut Uzman, who for four years was head of the Laboratories of Lipid and Protein Chemistry in the Foundation, with a research title in the Department of Pathology. It was here that he did his internationally recognized work on the chemical basis of lipoprotein hereditary disorders. To our great pride, he was chosen by Harvard to be the first Bronson Crothers Professor of Child Neurology at The Children's Hospital and the medical world looked to him for the establishment of a truly great department, both clinically and in research. This young man of tremendous achievement and far greater promise, possessed of an intellect which called forth the respect of people in the arts as well as in the sciences, was lost to the world less than six months after he assumed his Professorship. We recall with pride that in this environment he was able to demonstrate his greatness as a very young man, and that to this environment he returned to build what would have been an enormous contribution to child neurology and to science.

The second, Dr. Elkan R. Blout, since 1949 Head of the Laboratories of Biophysical Chemistry of the Foundation, was named Professor of Biological Chemistry at Harvard Medical School, effective January 1, 1963. During his tenure as a member of the Foundation staff, with a research title in the Department of Pathology, he and his colleagues contributed to more than sixty important publications in a field of great importance to our knowledge of protein chemistry. This laboratory has become world-renowned during the past fourteen years, and has brought great honor to the entire Children's Hospital Medical Center and the Harvard Medical School, as well as to the Foundation which sponsored, housed, and supported him.

### Department of Pathology

The daily responsibilities of the Department of Pathology are supervised by Dr. Gordon F. Vawter, and by his junior and House Staff. The routine of the Department has continued to be of high caliber. Dr. Vawter's scholarly contributions have enriched all parts of the Hospital. He has demonstrated an unselfishness and a devotion to excellence which have been recognized by the appreciation of his own House Staff, and by the older members of the staff of the several clinical services. His contributions are to be found in many clinical papers written by others whose work he has helped to make possible. The Department participates in a vast teaching enterprise not only in the second year, but also in the third and fourth years as well. In the year ending June 30, 1962, the Department performed 304 autopsies and gave diagnostic reports on 1,576 surgical specimens, 152 guinea pigs for tuberculosis, 325 assorted consultations, and 804 bone marrow examinations. Material for special study was furnished to many members of the Staff and to scientists in institutions in several parts of the country. In particular, research support of special nature was supplied to Drs. Schuster, Harkins, Harris, Fellers, and Shahidi. Members in training in the Department until June 30, 1962 included: Dr. A. Bhaktaviziam, Dr. A. M. Alkan, Dr. L. Rev-Kury, Dr. L. Chameides, Dr. E. T. Hedley Whyte, Dr. L. Miranda, Dr. L. Berman, Dr. K. Osborn, Dr. Ariga Moussa, Dr. G. Smith, Dr. P. M. Ming, and Dr. J. Craighead. The Children's Cancer Research Foundation supports two senior members of the Department, Dr. A. Bhaktaviziam and Dr. Mei Shen.

Dr. Vawter and his colleagues are participating at the moment in twelve projects in collaboration with seven



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other groups of investigators. The fields of activity vary from nutritional and metabolic disease, with particular reference to the gastrointestinal tract, the kidney, the central nervous system, and bone; to studies of the techniques and long term follow-up of various disturbances and malformations of the cardiovascular system.

#### *Laboratory of Orthopedic Pathology*

The program under Dr. Jonathan Cohen is part of a collaborative arrangement begun fifteen years ago with the Department of Orthopedic Surgery, under Dr. William T. Green. This work is conducted in the Children's Cancer Research Foundation's Jimmy Fund Building. Dr. Cohen and his assistants have continued to study tissue reactions to metal objects, including assay procedures and clinical aspects of incompatibility of tissue to surgical implants. He has explored the basic cellular reaction to small granules of metal and the reaction of bone to irradiation. Much of this work has important practical significance to orthopedic surgery. Recognition of Dr. Cohen's contributions is shown by his election to the Presidency of the Orthopedic Research Society and to the Pathology Committee of the American Association of Orthopedic Surgeons, which is concerned with the training of Fellows in orthopedic pathology. He serves also as a member of the Editorial Board of the *Journal of Bone and Joint Surgery*. Dr. Cohen's laboratory is one part of the training program of orthopedic Residents. His research and teaching activities give and receive great support from this association with the Department of Pathology.

#### *Other Special Fields of Pathology*

The Department of Pathology has been strengthened greatly by the availability

of three senior pathologists who are members of the staff of the Children's Cancer Research Foundation and are available to the Department of Pathology for consultation and cooperative research.

Dr. Agnes Burt Russfield, a recognized authority in the field of endocrine pathology, has made her knowledge, experience, and research activities available to the Department Staff and to members of the clinical staff of the Hospital, such as Dr. John Crigler, whose active clinical and experimental program in endocrinology is a part of Dr. Charles Janeway's Department. Dr. Giuseppe Cardinali, a highly gifted hematopathologist and investigator, is carrying on collaborative work with Dr. Vawter and acts as a consulting hematopathologist to the Department. Dr. Betty Geren Uzman, who began her career in pathology as an Intern in our Department of Pathology and who since has gained world recognition for her contribution to the origin of myelin in the peripheral and central nervous systems, has been a member of the Foundation staff, with a research title in the Department of Pathology, for fifteen years. The first electron microscope in the entire Harvard Medical-Longwood area was purchased by the Foundation for Dr. Geren's research in 1952. Arrangements have been made in the Foundation for training in electron microscopy of any members of the Hospital Department of Pathology or Hospital Staff.

#### *Laboratory of Brain Development*

Dr. J. LeRoy Conel continues his fundamental contribution to our knowledge of the postnatal development of the human cerebral cortex, which he began in our Department in 1930, by arrangement with and the enthusiastic cooperation of Dr. Wolbach and my-

self. Volume 7 of his internationally recognized series of monographs on this subject will be ready for distribution February 28, 1963, and Volume 8, on the investigation of the cortex of the brain of the six-year-old child, has been under way for a year. These studies have constituted the most valuable basis for the study of developmental behavior of children. They have been supported entirely by a grant we obtained originally in 1949 from the National Institutes of Health for Dr. Conel's work. This has been continued through the years and is in operation at the present time.

A recent professional appreciation of Dr. Conel's work by Dr. Alfred Meyer, Professor Emeritus of Neuropathology at the University of London, gives a magnificent summary of and tribute to Dr. Conel's contribution. He writes: "he has for the first time singularly succeeded in moulding the older with his numerous new observations into an organic whole. In doing so, he has earned the gratitude of all (anatomists, physiologists, psychologists and paediatric clinicians) who are interested in the problem of maturation." Dr. Meyer continues in his paper written in 1961: "the concluding pages of the 6th volume, with their emphasis on fundamental problems of structure and function, seem to portend that this may be the last volume of the series from the pen of Professor Conel." Volume 7 has been finished by Dr. Conel, since Dr. Meyer wrote those words, and Volume 8 is well under way. We are happy to report that Dr. Conel has already passed the expectation of Dr. Meyer for this epoch-making investigation.

It is our hope that Dr. Conel will continue for many years to come and that he will join the efforts of the Conel Laboratory in the Department of Pathology with those which have

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been inspired by him, particularly within the framework of the newly conceived International Institute of Brain Research. Dr. Theodore Rabinowicz, Neuropathologist in the University of Lausanne, has visited Dr. Conel to plan his own continuation of this work in the development of the prenatal cerebral cortex. It is a deep satisfaction that this internationally recognized scholarly contribution arose in our Department of Pathology, and thrived so magnificently in this environment over the last thirty-two years to become a classic in the history of medicine. We take this opportunity to salute Professor Conel and to congratulate him on his scholarly achievement and dedication to a task few men would have dared to undertake. We wish him many years of productive scholarship in his chosen field and are proud that his contributions form such a significant background for many important recent developments in our understanding of mental retardation, cerebral palsy, and the rapidly developing discipline of neurology of early life.

#### Laboratory of Neuropathology

I established this laboratory as a part of the Department of Pathology five years ago, under the immediate direction of Dr. Betty Q. Banker. This has been supported by funds obtained from the National Foundation for Neuro-muscular Diseases, Inc.

The initial purposes of this laboratory are still: the routine study of biopsy and autopsy material of neuropathological interest; the special study of problems encountered in the course of the routine study; the establishment of a teaching center for many to learn the basic fundamentals of neuropathology; and the presentation of neuropathological material to the pathologists, neurologists, neurosurgeons, and pediatricians.

Under Dr. Banker this department flourished and became a vital part of the intellectual activities of the entire Medical Center, and received recognition at the Harvard Medical School. In December, 1961 recognition of the contribution of this laboratory was shown by the award of a training grant from the National Institute of Neurological Disease and Blindness. Unfortunately, Dr. Banker was forced to resign July 1, 1962, because her husband had accepted a professorship in Cleveland. With her go the good wishes of the Department and the Hospital and this acknowledgment of the important contribution that she made in such a short time to our knowledge of neuropathology of early life.

We were fortunate in securing as her successor Dr. Floyd D. Gilles, who came to us from Baltimore with a background of training in neurology, general pathology, and neuropathology. With Dr. Vawter's immediate collaboration and support, Dr. Gilles has undertaken his new opportunities with vigor and promise and is working actively and effectively with the members of the Departments of Pathology, Neurology, and Neurosurgery.

#### Research Division of Infectious Disease

This section is taken from reports written by Dr. John F. Enders, Chief of this Division, and covers investigations carried out during the calendar year 1962, but mentions also further extensions or completion of studies undertaken earlier. An attached bibliography of papers published during this period can be utilized for detailed accounts, since this report will necessarily comprise only a summary of the work described.

In general, the direction of research has been toward the elucidation of various aspects of viral cytopatho-

genicity. In addition to more "fundamental" aspects of this significant phenomenon, laboratory investigations have been carried out on patients with viral infections and epidemics of suspected or demonstrated viral origin.

With the exception of research on measles vaccine, all other investigations have been supported directly by the U. S. Public Health Service, U. S. Department of Health, Education and Welfare, through the National Institutes of Health. The measles work has been supported mainly by the U. S. Army.

#### Interferon

A previous observation indicated that an attenuated strain of measles virus stimulated the production of more interferon in infected cell cultures than the virulent form from which it was derived. Similar data have now been obtained with attenuated and virulent strains of polio virus and mumps virus. It is planned to determine whether this difference holds *in vitro* with other agents, such as influenza virus. Continuing studies have attempted to determine the possible role of interferon in viral oncogenesis (see below) and in the susceptibility of the human fetus and infant to overwhelming infection with certain viral agents. Using a strain of attenuated type II polio virus, it has been found that with increasing age of the donor from whose renal tissues the cells were prepared, there is an increasing capacity of these human kidney cells *in vitro* to elaborate interferon. To date, tissues have been tested from fetuses, newborns, and older infants.

#### SV40 Virus and Viral Oncogenicity

Recently it has been demonstrated in this laboratory that the simian agent SV40, lately found to be a frequent contaminant of polio virus vaccines,



and capable of inducing tumors in hamsters, multiplies readily in cultures of various kinds of human embryonic cells. On passage in human embryonic kidney cells from newborns and infants of three months, the agent induces characteristic cytopathic effects.

A reproducible epithelioid transformation in primary cultures of human renal tissue infected with this same virus has been observed. This transformation is characterized by an abnormal growth pattern, a greatly accelerated growth rate, and chromosomal aberrations (analyzed by Dr. George Yerganian and Rei Kato of the Children's Cancer Research Foundation) of the cells.

Cell-virus relationships have been studied during the course of the cytolytic, proliferative, and transforming changes that occur in this system. Interferon has not been demonstrated in the chronically infected cells as compared to cells in uninfected cultures. Transformed cells exhibited increased resistance to injury by SV40 and an altered cytopathic response to infection with several RNA viruses.

With Dr. Jeana Levinthal of the Department of Bacteriology at the Harvard Medical School, an indirect immunofluorescent technique has been shown to be sensitive for the detection of SV40 virus in infected human and monkey kidney cells. In addition, a complement-fixing antibody has been shown to be present in the kidney cells of rabbits and guinea pigs hyperimmunized with the virus.

Studies are continuing with cloned cell lines from the SV40 transformation derived both from human tissues and embryonic hamster tissues which have recently been found similarly susceptible.

A filterable agent has been isolated from a transplantable spontaneous carcinoma of the Syrian hamster

associated with an acute hemolytic anemia. Under investigation are its identity as a virus, its behavior *in vitro* in a variety of cell systems, and its potential as an inducer of cell transformation.

#### *Effect of Hormones on Viral Multiplication and Cytopathogenicity*

Clinical evidence indicates that alteration in sex hormonal balance may influence the inception and course of viral disease (e.g., poliomyelitis in pregnancy). Few observations have been made on the effect of sex hormones in cell cultures infected with viruses. A study of this sort has recently been initiated, employing polio and measles virus together with estrogen, progesterone, and other sex hormones in systems of primary cell cultures. Definite effects have already been observed which encourage further work along these lines.

#### *Measles Virus*

In relation to the development of attenuated measles virus vaccine it is desirable to have additional means of identifying attenuated variants from virulent, naturally occurring strains. Studies along these lines are in progress in this laboratory. Several different "markers" have been defined, but the correlation of these with virulence for monkeys remains to be defined.

Investigation of the relative reactivity in man of vaccines composed of clonal lines of the presently available attenuated measles virus has been undertaken. Stocks of clonal viruses derived from seed pools for Vaccine A and B which have been employed in trials in man as well as from virus passed thirty times in chick embryos have been prepared. According to present plans, stock vaccines will be manufactured with these stocks and

tested in small groups of susceptible children.

The well-established fact that immunity against measles is of long duration, even in the absence of intercurrent exposure, has suggested the possibility that the agent remains latent in the tissues following recovery from an attack. Tissues from monkeys and human beings with previous histories of measles are being cultivated over long periods in an attempt to reveal the presence of measles virus.

#### *Clinico-virological Studies*

As in the past, patients entering The Children's Hospital suspected of suffering from viral infections continue to be studied by laboratory methods. Since the late summer of 1961, over forty agents have been isolated from patients with a variety of symptoms and are at present under study. Enteroviruses have been recovered from twenty-seven of forty-seven cases of aseptic meningitis occurring during this period.

In a study of five cases with classical Guillain-Barré syndrome, viral agents were isolated from each. In two patients, viruses were recovered from the spinal fluid which exhibited no pleocytosis. Although the viruses isolated from the five cases were not homogeneous in respect to species, the association of microorganisms of this sort with this syndrome warrants further investigation.

Studies of rubella patients have yielded viral agents using the interference techniques recently reported by workers at the Walter Reed Institute for Medical Research. This newly described method is being tested as a possible aid in the isolation of viruses from patients with infectious mononucleosis.

Several cases of fatal disseminated herpes simplex virus infection of the newborn have been investigated in an



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effort to gain further knowledge of the pathogenesis of this condition. A complete absence of maternal antibody to this ubiquitous virus seems to be the common feature in those infants succumbing to this infection.

An outbreak of respiratory illness among Harvard University students was investigated in late winter and early spring of 1962. Influenza B viruses were shown to be the responsible agents by both viral isolation and serological response among patients at the Stillman Infirmary.

### *Antiviral Compounds*

A factor has been demonstrated in a corynebacterium which interferes with the multiplication of several Arboviruses in tissue culture. This depends on the inhibition of replication after the virus has entered the susceptible cell. The substance appears to be a protein and is being further investigated to determine its exact nature, site, and mode of action and the range of agents inhibited by it.

One of the 5-halogenated pyrimidines has been selected for study of the effects of this group of compounds of *in vitro* infection with DNA viruses. With careful dose-time relationships to be observed, this compound (I.D.U.) exerts a regular inhibitory effect on a number of such viruses assayed—herpes simplex, vaccinia, and some of the adenoviruses.

### *Miscellaneous Studies*

A simple, rapid method for the production of viral antibodies in mice has been worked out utilizing Ehrlich tumor cells as the source of peritoneal fluid containing high concentrations of neutralizing antibodies against previously injected viral antigens.

The growth of polio virus strains in cotton-plugged monkey kidney cell cultures was found to be slower than

in the usual screw-capped tubes. The degree of retardation depended on the virus strain and the cell lot. The factor responsible was bicarbonate concentration and the effect was far more marked on attenuated strains than virulent ones. The delayed increase in virus production resulted from slower intracellular synthesis.

### **Laboratories of Clinical Pathology**

These lines are taken from the several reports prepared during 1962 by Dr. Harry Shwachman, Chief of these Laboratories.

In the twelve months ending August 31, 1962, the Laboratories of Clinical Pathology performed 131,669 laboratory tests which were recorded for billing purposes. This enormous routine was carried out by Dr. Shwachman and his devoted staff with accuracy, efficiency, and commendable speed. This Department is responsible also for keeping various laboratories within the Hospital complex properly supplied with equipment and reagents, and for the control of the laboratory tests made in all parts of the Hospital. The assignment of one medical House Officer to the bacteriology laboratory has been good for the laboratory as well as for the education of the House Officer. It should be worthwhile to extend this kind of training of the House Officer to the laboratories of chemistry and hematology and other special laboratory disciplines. Much was gained from 1927 until 1940 when a high percentage of medical House Officers rotated through both the pathology and the bacteriology laboratories as part of their internship program. It was during this period also that large numbers of Interns in Orthopedic Surgery and general Surgery spent from six months to a year in the Department of Pathology.

The Laboratories of Clinical Pathology have been given high recognition from former Residents and from the medical community in which we live. The Department is called upon for the performance of all new procedures by doctors in hospitals in this part of the country and acts as a center of consultation for the clinical pathology of early life. Numerous patients are referred by pediatricians practicing in the community for special laboratory procedures. There is unfortunately not sufficient space to enlarge this important contribution to the community. This had been planned for when the clinical division was set up in 1946 and should constitute an important development when new space becomes available. The Laboratory of Clinical Pathology is open twenty-four hours a day, which makes possible important decisions and treatment at the time when decisions must be made quickly. This service is used by other hospitals which do not have weekend or evening facilities of this kind.

The importance of the Laboratory as a source of adequate control of chemical and sterilizing processes in the Hospital can not be overemphasized. Sterility procedures as related to formula preparation and the accuracy of preparation of intravenous solutions form part of this responsibility. The bacteriology laboratory aids in the prevention of the spread of infection throughout the Hospital. Both Dr. Shwachman and Dr. George Foley, consultant in bacteriology and Chief of the Microbiology Laboratories of the Children's Cancer Research Foundation, serve on the Hospital Committee on Infections. The vigilance of this Committee, based upon the expertness of the bacteriology laboratory, is responsible for the prevention of many infections which might have proved

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fatal or the starting point of epidemics.

Dr. Shwachman and his staff are responsible for constantly developing new procedures which prove to be of great clinical importance. There is a bizarre and unusual form of allergy to milk in which respiratory symptoms predominate. This Laboratory was the first to confirm the laboratory and clinical observations of Dr. Heiner, a graduate of this Hospital, in this field. A case in point was that of a baby who presented symptoms of constant cough, failure to thrive, and irritability. When the correct diagnosis was made by a positive milk precipitin test and milk was removed from the diet, the child made a rapid recovery and began to eat and grow normally and, in addition, became a pleasant, happy child in sharp contrast to his previous disagreeable disposition. Many of the recently recognized metabolic disorders, such as galactosemia, are recognized by tests performed or perfected in this Laboratory. This is true also of a metabolic disorder characterized by phenylketonuria in children with mental retardation. The early recognition of this condition and the prompt institution of a diet to eliminate the offending amino acid will result in improved growth and development. The Laboratory has now undertaken the detection of phenylalanine in blood to permit the definitive diagnosis in instances when the screening procedures which involve a very simple urine test are either positive or questionable. It is estimated that approximately one per cent of all patients in state institutions suffer from this congenital metabolic abnormality. There is scarcely a clinical procedure on any one of the Services of the Hospital that is carried out today without the benefit of some information from the clinical laboratories.

### Research

The bibliography gives a good picture of the wide variety of investigations carried out by Dr. Shwachman and his colleagues. The most important field of investigation is still cystic fibrosis. Studies have been carried out in the field of genetics, biochemistry, bacteriology, and physiology, particularly in relation to pulmonary function and to the mechanisms of sweating in relation to pancreatic function. Collaboration with members of the Departments of Surgery, Radiology, and Pathology has resulted in important progress. This research program has served, too, as a training ground for a large number of physicians. Dr. Shwachman is presently President of the Cystic Fibrosis Club and Chairman of the Scientific Advisory Board of the National Cystic Fibrosis Research Foundation. In collaboration with Mr. Louis Kopito of Baird Atomic, an important improvement in the diagnosis of cystic fibrosis by the recognition of metals in samples of hair by emission spectroscopy was achieved. Perfection of this test and proof of its accuracy would greatly simplify the diagnosis of cystic fibrosis and permit recognition of the disease from examination of specimens of hair which could be sent by mail from all parts of the world. Dr. Shwachman and his colleagues have reported recently a group of fifty patients with cystic fibrosis who are alive past the age of seventeen. The majority of these patients have been studied and treated here for over a ten-year period. This is a remarkable achievement when it is considered that the disease was regarded as universally fatal in infancy and early childhood not more than fifteen years ago.

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## REPORT OF PSYCHIATRIST-IN-CHIEF

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### Introduction

In the year 1962 the Psychiatry Department had its busiest year since its establishment nine years ago. As will be noted in the detailed report below, plus the accompanying tables, the actual work done in service to children, training and education, and research has shown a definite growth and expansion since the time of our last report to the Trustees two years ago.

As was emphasized in my last report, it is extremely difficult to separate the psychiatric, clinical psychology, and psychiatric social work activities of the Department of Psychiatry in the Hospital from those being carried out in the affiliated Judge Baker Guidance Center situated across Longwood Avenue. Since the Judge Baker became located in its new quarters across the street, with its out-patient division, in-patient division, and Manville School, many functions of this Department have been coordinated with—or integrated into—those carried out by analogous professional personnel in the Judge Baker units. This will be seen to be particularly true in reference to training, education, and research.

### Service

Psychiatric and psychological service has continued to be offered to the children referred to the C. H. M. C. through the central clinic which is located on the second and third floors of Building A. From this central clinic the service needs of the MOPD, the Adolescent Unit, and the various in-patient wards and units of the Hospital have been met through assignment of personnel designated to care for specific area needs.

As will be noted from the statistical chart, the diagnostic, consultation, and treatment services offered to the children of the Hospital community were increased during the year. In spite of this increase it is well to

bear in mind that the full-time and part-time personnel of the Department were still unable to meet the demands of the physicians on other services of the Hospital for psychiatric diagnostic and treatment work. Hence there always has been a waiting list of patients to be served in all disciplinary categories of the Department. These unmet needs are particularly apparent when one considers the waiting list for psychiatric treatment and psychological testing and evaluation, and although the Department has by specific policy confined its service functions to those children who are "C. H. M. C. patients," it is evident that it will be many years at least, before Department personnel sufficient to meet these needs will be available to the Hospital staff as a whole. (It should be added, parenthetically, that this condition of mental health manpower shortage and financial limitations obtains in all of the child psychiatric facilities in Boston, even though in the number of its accredited and approved child psychiatry clinics this city has a far greater number than any other city in the country.)

However, in spite of these shortages and its stated policy of priorities for C. H. M. C. patients, the Department works cooperatively day after day with schools, courts, and agencies in the community in an attempt to secure service to forward and ensure the mental health of children and the parents of children. If our work through consultations and diagnostic evaluations indicates that a child or its parent needs help, our clinic teams (psychiatrist, psychologist, and psychiatric social worker) do their very best to refer the child for initial or continued psychotherapy or social case work help elsewhere. Finally, the members of the Department have always held themselves available to pediatricians, private practitioners, and others

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inquiring for help who wish to have suggestions and guidance in respect to referral of their patients to private child psychiatrists in the community. Requests of this nature number in the scores each year and it is our policy to do our best to find psychiatrists for those who wish to get—and can afford—private treatment.

### Training

#### *Child Psychiatry*

As in past years, we have continued the coordinated training program for the specialty of child psychiatry. During the past year we have had a total of nine physicians in training for this medical specialty, three in their second year of training and six in their first year. It is to be remembered that all of these physicians have had at least two, and sometimes three, years of training in general or adult psychiatry before coming to us, and the majority of them have had a year of training in pediatrics. In addition to the above full-time Residents who are being trained specifically for work with children, we have had two Junior Assistant Residents who were with us for part-time orientation and training in the field of child psychiatry as an adjunctive or integral part of their three-year training in general psychiatry.

During this year we received a generous training grant from the National Institute of Mental Health for the training of Board certified or Board qualified pediatricians, and two of them have taken advantage of this educational program. This new and specialized program is a part of the NIMH's General Practitioners' Training Program which has been established in various medical centers throughout the country and it is expected that these programs now open to pediatricians will expand in numbers and significance in the years ahead.

Through our affiliation with the

Judge Baker, the content of the training program in child psychiatry is diversified and comprehensive. Both in their clinical work and in their didactic seminars, opportunities are offered to the Residents to become acquainted with the psychiatric problems presented by children in both a hospital setting and in a community child guidance center. The case types, diagnostic classifications, and age levels of children coming under their supervised care are varied, so it is possible for them to gain experience with children exhibiting the severest behavioral deviations, as well as with children whose disabilities are developmental or transitional in nature. Finally, the intensive work with patients on the in-patient division of the Judge Baker offers them the opportunity to broaden their training experience the better to equip themselves to practice their specialty in both in-patient and out-patient mental health settings for children and adolescents.

#### *Clinical Psychology*

During the past year the Division of Clinical Psychology has had five pre-doctoral candidates in training in clinical psychology. These trainees are recipients of United States Public Health Service stipends from the NIMH and come to us from graduate departments of various universities. In addition, there were two students from the graduate programs at Harvard University and Boston University who received a year's experience as clinical clerks in psychology. These students combined their clinical work with the academic work of their second and third years of graduate study. The content of their clinical work with us is aimed at giving them as wide an experience as possible in psychological testing and individual counselling, plus acquainting them with possibilities for research with children with emotional problems.

Finally, there were two post-doctoral trainees in this discipline with us in the past year. In this training program, too, our aim is for the widest possible variation and diversification of case types, including children with emotional difficulties, educational problems, and children with organic brain diseases.

#### *Psychiatric Social Work*

The Division of Psychiatric Social Work continues to be a training area for social case workers in the C. H. M. C. During the year, we have had three students in training, one each from Simmons, Boston University, and Boston College Schools of Social Work. Psychiatric social workers are trained to work in close collaboration with the psychiatrist and psychologist as a member of a clinic treatment team and their special area of work is that which deals with the coordinated treatment of the parents of the emotionally disturbed child. It is important to bear in mind that psychiatric treatment of children invariably does involve the coordinated and simultaneous treatment of the parent or parents of the child. To carry out this function relative to effecting the beneficial changes in the child-rearing practices of parents, the psychiatric social worker plays a most important role; and parents are seen as often as is the child.

#### *Education*

The many and varied mental health educational activities of the members of the Department of Psychiatry are carried out, in the main, in conjunction with the Harvard Medical School; the Harvard Department of Social Relations, both at the graduate level and undergraduate level for students in Harvard University and Radcliffe College; and with the Harvard Graduate School of Education.



*Harvard Medical School*

**First Year.** The members of this Department at the Judge Baker and the C. H. M. C. offer lectures and clinics in that segment of the first year curriculum entitled "Growth and Development." These lectures, with illustrative clinical material, stress normal personality growth in children. The various tasks in personality development set for the child are outlined, together with the crises and threats that may block or divert the normal process of maturing.

**Third year.** To the third year medical students, six lectures are given on the most frequently encountered childhood neuroses and psychoses. A two-hour seminar each month is also given to students in their pediatric program at the Hospital.

**Fourth Year.** In association with the Department of Medicine of The Children's Hospital, there are weekly clinical exercises on the responses of children to the effects of hospitalization, and a two-hour session held with the fourth year students at the Massachusetts Mental Health Center, dealing with the problems of adolescents. Also in association with this Department we supervise psychiatric teaching of fourth year medical students in the Well-Child Clinic and Family Health Care Program.

There is a month's elective course in child psychiatry offered at the Hospital to the fourth year medical students. In this course the students interview both child patients and their parents and take part in the psychiatric consultations of staff members with patients on the wards. They also attend teaching conferences at the C. H. M. C. and at the Judge Baker across the street.

*Harvard University Department of Social Relations*

In the past year, five students at the

second year graduate level have been assigned to The Children's Hospital Department of Psychiatry-Judge Baker for an internship in clinical psychology through the academic year.

Two hour-long graduate seminars in clinical child psychology are given each week throughout both fall and spring terms. The second year graduate students in the Division of Clinical Psychology of the Department of Social Relations are required to take these seminars. These seminars include the orientation of the student in clinic practices and offer instruction in the diagnosis and counselling of child patients and their parents.

Two courses to which undergraduates at Harvard and Radcliffe are admitted are given in the Department of Social Relations by members of our Department, each of which was taken by approximately fifty students this year. One of these, "Social and Psychological Aspects of the Practice of Medicine," given by Dr. Croog and myself, is offered to pre-medical students and to seniors concentrating in Social Relations. Other members of the Hospital Staff, besides those in the Psychiatry Department, assist in offering this sequence of lectures on medical care in the various countries throughout the world and on the meaning of disease to the patient and the patient-doctor relationship.

*Harvard Graduate School of Education*

Three members of the Department of Psychiatry hold lectureships in the Harvard Graduate School of Education. Their duties in course-work in Cambridge and their clinical supervision of students at the Hospital and at the Judge Baker have as goals the education and training of graduate students in the field of educational psychology (with emphasis on testing, evaluation, and diagnosis) and psychological coun-

selling. During the past year, four students were accepted for the clinical training sequence in this coordinated program.

In commenting on the education of professional personnel relative to personality development and psychiatric treatment of children we felt that more than passing emphasis should be placed upon the importance of the instruction given by members of the Department of Psychiatry to professional personnel within the Hospital who are members of other disciplines. Most important among these educational endeavors are those relating to the instruction of Residents daily in medicine and surgery on all the wards of the Hospital in connection with consultative work by members of this Department. Added to this is the day by day instruction of, and conferences with, the medical Residents in the Medical Out-Patient Department. It is instruction at close range and in respect to specific cases needing treatment which seems to us to have the greatest value in acquainting non-psychiatric physicians with the meaning and management of children suffering from behavioral disabilities and disorders. As stated above, more formal instruction is given in weekly case presentations by the medical Residents to the Psychiatrist-in-Chief and his associates each Friday morning throughout the year and daily in the Well-Child Division of the Department of Medicine. In this latter teaching area medical students, nurses, and Residents also are in attendance.

Finally, the Department members take an active part in the education of non-medical professional personnel who have the responsibility for the day by day care of children in the Hospital, and the responsibility for the guidance of parents of sick children. Members of our Department give courses and clinical demonstrations to members of

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the Social Service Department who work in the medical and surgical areas of the Hospital, the nurses who are affiliated in training in our School of Nursing, members of the Department of Patient Education and Recreation, and trainees at the Hospital in the field of physiotherapy. Less formally, lectures are given on occasion by members of the Department to parent groups who meet under the aegis of other Departments in the Hospital for group instruction relative to the care of children suffering from various disease conditions, e.g., seizures, hemophilia, diabetes, etc.

### Research

Members of the Psychiatry Department have continued and extended their research activities and interests during the past academic year. A list of publications from the Department is appended to this report. The greatest research opportunities for psychiatrists and psychologists working in a children's hospital setting deal with items relative to child growth and development and to those factors causing deviations in, or alterations of, the maturation process. In keeping with these almost unlimited opportunities, our present research and that projected for the future has specific reference to this area of investigation. Thus our projects deal with both the general blocks to personality development as evidenced in serious learning disabilities and also are concerned with the effect of specific physical disabilities upon various parameters of personality growth. Specific projects being carried out in these multi-varied areas are as follows:

Following the exploratory and pilot phases of their research mentioned in our last report, Drs. Geraldine Rickard and Haskel Cohen received support for their research from

the National Association for Mental Health through a three year grant ending in 1964. These investigators are developing a psychological test to determine children's progress in selected tasks of emotional development through childhood. This study should furnish us with much-needed normative data regarding personality development and enable us to detect deviations in their earliest stages through the medium of objective tests and measures.

Dr. Marvin B. Krims is carrying out an ongoing psychiatric study of children with abnormalities in physical growth and development due to endocrinological disturbance. This study is a collaborative project with the Endocrine Clinic. Most of the children studied fall into two groups: those with markedly advanced and precocious physical development, the so-called precocious puberty group, and those with markedly retarded physical growth. The study is designed both to shed light on the emotional problems and responses of such children in order to promote the total care of the children themselves, and to clarify the psychological growth of normal children.

Environmental influences on infant vocalization were studied by Dr. Eric H. Lenneberg. Details of the apparatus and technique were published elsewhere. Babies were followed from birth to the first three months at bi-weekly intervals, with twenty-four hour tape recording at each observation. Data include quantitative and qualitative variables in the baby noises, as well as quantitative and qualitative variables in those noises to which the baby was exposed. All subjects were well babies, ten of whom were born into normal homes and six born to congenitally deaf parents. The congenitally deaf parents could not speak and usually did not know

whether a child was making any kind of sound. Thus chances for reinforcement for vocalization and opportunity for direct imitation were dramatically reduced in the experimental group. He and his co-investigators, Freda Rebel-sky and Irene Nichols, are just now completing analysis of the last data and expect to have the investigations written up by summer.

Language development in Mongolism was the subject of a three-year project conducted by Dr. Lenneberg and Irene Nichols and Eleanor Rosenberger now completed and written up. These children are interesting because of their slow development, their gross mental deficit, and their inability to learn from the experimenter during the examination. For further details see the write-up.

Dr. Lenneberg, in cooperation with Dr. Joseph Winston, a surgeon at the Boston Dispensary and Rehabilitation Institute, is studying patients who have suffered traumatic division of the median nerve at the level of the wrist. The nerve is sutured end to end and return of sensation in the inner aspect of palm and affected digits is studied periodically. Of special interest is the patient's ability to localize points of sensation. It is assumed that normally there is a point by point representation of the skin (and particularly the hand) on the cerebral cortex. (Sensory maps by Penfield.) When the nerve is divided and sutured again the thousands of axons and fibres will necessarily be disarranged anatomically so that the former cortical map is no longer isomorphic with the nerve endings after regeneration. The question is whether in the return of sensation a new and orderly topographical reorganization develops, or whether the patient can learn, by training, to refer sensations to the correct location in the hand.



A somewhat similar study of sensory-motor coordination after surgical disarrangement is also being conducted by Dr. Lenneberg. Subjects are patients with surgical reconstruction after trauma, particularly where transfer of digits or transfer of neurovascular island flaps were performed. Tests consist of motor responses to somesthetic stimulation. How well can a patient learn that a sensation that was formerly associated with, say, the ring finger, must now be referred to the thumb?

During the summer of 1961 a Harvard Medical student, Sam Putnam, took part in an expedition to New Guinea where he gathered sound samples of infant vocalizations of the tribe which he visited. Subsequently, several people in the Department of Anthropology at Harvard have shown interest in pursuing this work further and more extended collection of infant vocalizations and speech development is contemplated. From March until November of 1963, Mr. Karl Heider from Harvard's Peabody Museum will again be in New Guinea in the Grand Valley where he hopes to study approximately two dozen children of various ages. For each child he will take careful anthropometric measurements, administer a test of motor development (Nancy Bailey's), make high-fidelity sound recordings of vocalizations, and in addition, discuss the child's language progress, his customary mistakes and his manner of speech with adult informants. In 1964 two other anthropology students, Eleanor and Christopher Crocker, will be going to Central Brazil to study the Xingu Indians under the direction of Dr. Maybury-Lewis. Mrs. Crocker is now working in Dr. Lenneberg's laboratory in Boston in preparation for her field work next year. Further, Dr. Lenneberg plans to do comparable field work this

summer in the Ramah area on the New Mexico-Arizona border. He has been invited to do this work under the auspices of the Indian Museum in Santa Fe which is beginning a social-anthropological field station under the direction of Dr. Nicholas Colby; in order to be able to make use of the museum's contacts with Indians he will be given a courtesy appointment in the museum for the duration of his work.

During the last few years a great deal of preliminary research has gone into the planning of a study of deaf children's acquisition of language, particularly grammatical rules. Dr. Lenneberg and his associates have investigated the grammar of their spontaneous writings as well as their responses to specific tests of their language skills. He and his associates are now ready to start a broad and well-controlled investigation of language acquisition in the deaf. Three school populations can be used, and for every child in these schools history and medical data will be gathered and transferred to an I.B.M. card and then correlated with the results of the carefully administered language acquisition test.

Dr. Lenneberg is presently conducting an investigation into the physiological basis of rate and rhythm of articulatory movements during speech. Special equipment has been devised for this purpose, and in April 1962 he engaged the services of an electronic consulting firm, Bolt, Baranek and Newman, to write a program for a high-speed electronic computer which is presently processing his data.

During the past year, Dr. Felix Deutsch and Dr. Tully Benaron, with the collaboration of other members of the Department, have continued their intensive study and analysis of drawings and paintings of children manifesting certain psychosomatic disorders.

The pictographic productions of these children are studied from the point of view of their relevance to their symbolic meanings that, in turn, have relevance to diagnosis and prognosis of the clinical condition. Analyses of these data have also demonstrated their significance relative to the body image of the child and in respect to the maturation of mental processes.

A detailed resumé of the very significant research activities of Dr. Peter H. Wolff and his research associates dealing with numerous parameters of infant and child development compiled by Dr. Wolff for this report to the Trustees is as follows:

"Since the time of my last report in 1961, progress in developmental studies has been made in several areas.

"The second monograph on neonatal behavior was accepted in its submitted form in the *Psychological Issues Monograph Series*. In that monograph I reported a cross-sectional study on newborn infants: the data are systematically presented in statistical form, while the lengthy theoretical discussion that follows is intended as a basis for longitudinal studies in developmental terms. Just as my original monograph was intended as a broad theoretical statement to serve as a program of developmental studies on emotional expression, so this monograph is intended to provide the empirical basis of neonatal behavior patterns on which my further observations are based. The data analysis of observations beyond the neonatal period (from zero to three months) has been completed only in part, and my major writing activity at present is committed to the analysis of protocols from daily observations of infants in their homes. So far two longitudinal studies have been written up and will appear as separate chapters in the Ciba Symposium.



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"The developmental study of smiling behavior in Mongoloids and congenitally blind children, at the Walter Fernald School, has made headway. Dr. Sadako Imamura and I have followed social responsiveness of these children longitudinally over the past nine months (youngest Mongoloid three months, oldest fourteen months). We have collected comparative data on the chronological sequence in the development of smiling that parallels my observations on the development of smiling in normal infants from zero to three months.

"The work on smiling is carried out simultaneous with a study of the development of stereotype behaviors in institutionalized children (in this case, for example, Mongoloids and blind children). We are making detailed descriptions of stereotypies from month to month to follow their behavior, and recently have begun to film this progress by movies. Preliminary results indicate the expectable finding of a lawful and predictable sequence in the varieties of stereotypies in these children paralleling their general motor-coordination development. We believe that such data eventually will give us some clues about the 'adaptive significance' of stereotype behaviors in feeble-minded, autistic, and blind children.

"Dr. Imamura and I have been impressed with the broad range of variation in motor coordination and social responsiveness among the Mongoloids we are observing. Because of this wide range in social behaviors we have raised the question whether the more advanced and appealing children are socially so responsive *because* they have been "adopted" by one of the nurses on the floor so that their social behavior has advanced more rapidly because of environmental stimulation; or whether the advanced children are simply less defective and therefore are more appealing to the nursing staff. To attempt

a partial resolution of this problem we have recently initiated a pilot study in which we have hired a young woman who has had experience caring for a Mongoloid; her sole task is to provide mothering care regularly for two of the four most retarded Mongoloids over a period of two months while the other two severely retarded Mongoloids serve as controls. After the two-months period we will re-test the children's social responsiveness by the measures already developed, by the complexity and quantity of their stereotype behaviors, and by their responses to the appearance and disappearance of the care-taking person (as recorded on film). Because there appears to be a distinct overall difference between the most advanced and the most retarded Mongoloids' intellectual and social behavior, we have arranged to do chromosome studies on several of the children at both ends of this behavioral continuum in order to explore whether the differences may be due to variations in chromosome abnormality. If this exploratory study should prove promising, I am considering more detailed studies on the relation between chromosome abnormality and the level of social and intellectual performance in these as well as other congenital defects, these to be related to structural abnormalities in chromosome patterns. This approach may eventually make it possible to undertake an investigation of behavioral genetics on young subjects without the many methodological complications introduced by co-twin studies, population surveys, etc.

"Together with Doctor Irving Hurwitz, of the Judge Baker Guidance Center, I have followed up H. F. R. Precht's finding that the 'choreatiform syndrome' (a complex of behavioral disturbances such as impulsivity, motor restlessness, learning difficulty, short attention span, etc.) and physical symptoms (brief intermittent myoclonic

twitches of the distal skeletal musculature) are significantly related to perinatal anoxia of the newborn.

"Our core study in this respect includes a survey of the Newton grammar and junior high school population from the fifth through the eighth grades. In this group we have surveyed more than 1,500 children for the presence or absence of the choreatiform twitch. At the same time, Dr. Elizabeth Makkay and her associates from the Judge Baker have surveyed the same population from a behavioral point of view, and have so far selected a group of 450 children who were referred to them by teachers because of various disturbances such as learning problems, impulse behavior, early signs of delinquency, etc., for more detailed study. At present we are correlating our incidence survey with that of Dr. Makkay's tabulations of behavior and developmental difficulties. Our anticipation is that a high percentage of the children we have diagnosed as positive by a simple physical diagnostic test, will also appear in the sample selected by Dr. Makkay for more intensive study because of reported psychopathology. Since in both methods of selection the degree of severity of disturbance was included as part of the scoring method, we believe that the correlations can be carried out in a semi-quantitative fashion.

"Last summer Dr. Hurwitz and I surveyed the total population of children attending Dr. Young's summer camp — Camp Wediko — for children with severe behavior disturbances. This group was particularly suitable for our study because detailed medical, developmental, and psychological histories, as well as the birth records, are available for review. In this camp we found that 67% of the children have choreatiform twitch (as opposed to 5% to 7% in the normal population), and this summer a graduate nurse working

with us will review the developmental histories of all the children at the camp, to establish the correlation between those found with behavioral development and evidence of early disturbance on the one hand, and the physical symptom on the other hand.

"A survey of delinquent boys detained at the Youth Service Board shows the choreatiform twitch in about one-third of that population; Dr. Hurwitz is at present correlating the findings with his own studies of motor coordination (as measured by the Oseritzki Test). A similar survey of the resident population of the Judge Baker Guidance Center — children who are placed here primarily for learning difficulties but have also a wide range of other psychological disturbances — indicates a similar 30% incidence of the physical sign, although most of these children had previously been diagnosed as neurologically normal.

"The significance of our results rests on the fact, we believe, that the overall incidence of this twitch in a presumably normal population at the Newton High School System does not exceed 5-7% and that the much larger incidence of this minimal neurological symptom may well correlate with a variety of behavioral disturbances. At present we have no intention to assume that there is a direct cause and effect relationship between the behavioral disturbance and the twitch, but only a partial determination. We have made preparations to check our clinical diagnoses by objective measures, and are now prepared to test a randomly selected number of children by electromyography.

"As an outgrowth of my studies of neonatal behavior, I have become interested in studying the sucking patterns of newborn babies, while they are in deep sleep. In this organismic state

the sucking behavior shows a high degree of regularity and constancy which makes the measurement of sucking a potentially useful tool to study individual differences between normal newborns, diagnostically significant differences between normal and brain-damaged infants (for example, children with minimal brain damage whose illness is not otherwise diagnosed), and 'congenital' biological rhythms which determine sequential behavior patterns such as rhythmical sucking, etc.

"I have completed a preliminary study of sucking patterns in deep sleep on twenty children; this study was focused on the patterns or rhythms themselves (the frequency of sucks per second, the distribution of sucks over time, the alternation of rhythms by hunger and other adventitious stimuli) and I have explored various experimental techniques for modifying the 'inherent' rhythm by such devices as photic flashes and metronome sounds. At present I am working out techniques by which to record these sucking patterns in sleep in such a way that they can be analyzed electronically, since the making and analyzing of individual tapes is a time-consuming procedure (although it did show us which parameters of sucking behavior were the significant ones for study).

"For the summer period, a first year medical student and I have returned to a project for which I have been collecting preliminary data during the past eighteen months. The project concerns the observation of infants being fed by gastrostomy because of various surgical anomalies. The questions which we hope to clarify in part are the following:

"First, if a newborn baby has never had a satisfactory experience of sucking (in terms of hunger reduction), does the sucking mechanism

remain intact, are the patterns of sucking the same as those in a normal infant of comparable age, or does the fact that such infants receive no food in response to their sucking efforts impair sucking behavior? In particular we will record the sucking pattern on the first occasion after such infants are allowed to suck on a sugar nipple (about ten days after surgery and twelve days after birth), and after a period during which their only possible exercise of sucking would have been with their own fingers; after they have practiced sucking for several days, but before they receive food by the oral route; and after the first day of nutritional sucking.

"Second, the obscurity, despite many animal experiments and clinical observations, of the 'arousal' factor of hunger. Neither blood sugar nor gastric peristalsis appears to influence the infant's behavior in a way to suggest that they are the critical factors associated with what the observer would identify as 'hunger-behavior.' Using the infants with gastrostomy tubes, we intend to control the variable of gastric distension (which seems to be directly correlated with behavioral manifestations of hunger) by replacing the usual gastrostomy tube by a Miller-Abbott Tube on the tenth day and, as the food ingested leaves the stomach, to make up the decrease in volume of water in the Miller-Abbott balloon, thus keeping the absolute volume of gastric contents relatively constant. We will record the sucking patterns and the duration of sleep and waking as dependent variable.

"And third, we will explore the questions inherent in the ethological assumption of 'instinct-specific energies' or motivations. Once the infant takes his feeding by mouth, but before the gastric tube is removed, we will

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carry out 'sham-feeding' experiments in which immediately after a feeding we will remove all the food the infant has taken. If the ethological assumption is correct, the infant on a sham feeding should behave like a fed infant; if not, his behavior would indicate that he is hungry. We also plan to carry out the sham-feeding experiments, but maintain a constant volume of gastric contents through the Miller-Abbot Tube.

"As an outgrowth of the chromosome studies on Mongoloids, Dr. Park Gerald, from the Clinical Genetics Laboratory, and I have begun a pilot study on the psychological functions of children and parents with unusual chromosome defects. The first developmental studies on pre-verbal infants have been started with the help of Dr. Marion Fiedler and Mrs. Annette Silbert, of the M.I.H. project, and we hope to develop a systematic longitudinal follow-up program of psychological development in children with chromosomal abnormalities. I expect that this area of research may in time expand into a major effort; at the present we have intentionally kept the scope of the study small to work out proper testing techniques and to select carefully which of the myriad of genetic defects it will be most profitable to study from a developmental point of view."

#### Future Needs and Items For Discussion

In the foregoing survey I have outlined the treatment, training, and research activities and programs of the Department of Psychiatry of The Children's Hospital Medical Center in the year October 1961 to October 1962. I have stressed those activities and work of the Department's personnel in the Hospital proper and have included the coordinated work with the affiliated Judge Baker Guidance Center. In

conclusion, I would like to list needed new programs or needed expansion of existing programs that would add to our effectiveness in dealing with the mental health problems and behavioral deviation of children.

There is need for a modest number of beds in The Children's Hospital with proper facilities for the care of child psychiatric emergency cases that are from time to time brought to our out-patient or emergency clinics, or that develop in the Hospital on one or another service. Although we have twenty-six beds on the in-patient service at the Judge Baker, we are not equipped either by ward structure or personnel to handle the youngster who presents an acute behavioral emergency. The value of an in-patient unit of this type as a training and research area also should be emphasized.

We definitely need expansion of the psychiatric treatment and research personnel and facilities to include the infant and pre-school child, psychological testing programs, and, especially programs of training for clinical psychologists who may, we hope, become specialists with this particular age group.

There is a need to include mental health principles and mental health personnel in the recreational and educational programs for in-bed and convalescent patients.

With the establishment of the new Department of Neurology it is hoped that cooperative schemes of training, treatment, and research will go forward. It seems to me that with an expanded and definite Neurology Department the widest spectrum of cases of both the organic neurological and the emotional-behavioral type could be cared for within our own Children's Hospital Medical Center. It presents an opportunity for a broad and eclectic treatment program, and for a training

and research approach to these disabilities of childhood.

The possibilities for the appointment of one or two full-time psychiatrists to our staff should be explored seriously. In the Department of Psychiatry — as in some of the other departments of the Hospital — the lack of outstanding "personnel in depth" constitutes, to my mind, a serious situation in the evolution of future treatment and research programs and in the maintenance of a Harvard teaching program of high quality in child psychiatry in this Hospital.

George E. Gardner, Ph.D., M.D.

*Psychiatrist-in-Chief*



## SERVICE STATISTICS

October 1, 1961 - September 30, 1962	
Therapy session with patients	4,755
Interviews with parents of patients	3,439

## PSYCHOLOGICAL EVALUATIONS

(separate visits; each visit is at least one hour)

MOPD	636
WARDS: of which 17 were patients on a private fee level	348
Adolescent Unit	172
Out-Patients (on a private fee level)	138
Psychiatry Clinic	105
Children's Mission	26

## DIAGNOSTIC EVALUATIONS

MOPD	
patients	904*
parents	249
Adolescent	
patients	69
parents	40
Seizure Unit	
patients	13
parents	13
Ward	
patients	101
parents	
Endocrine	
patients	13
parents	2
Number of patients referred to the Psychiatry Department for the above service	1,417
Average number of children seen in therapy during current year	215
Average case load in intensive treatment at any one time	152
*680 were Full Diagnostic Evaluations	

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# **REPORT OF RADIOLOGIST-IN-CHIEF**

The period covered by this report has been a busy and productive one. Examinations continue to increase in number and complexity. Equipment becomes obsolete and is replaced. Wet film development has given way to automatic processing, fluoroscopes to image amplifier systems, and cine and television presentations have become commonplace. Specialized equipment for neuroradiology is essential and other equipment of advanced design is used for the study of the cardiovascular system alone. The study of normal and abnormal physiology has become as important as the examination of gross morphological changes. Few portions of the human body are beyond the reach of radiological investigations and in the Department during the last year certain studies on the anatomy and physiology of the Eustachian tube leading to the middle ear have been carried out successfully for the first time.

Mr. Eric Hammond, Technical Assistant to the Department, has provided leadership to the radiologists and to many industries in indicating and establishing trends in roentgen techniques so that very soon we may hope for even more definitive use of radiography under image system guidance that will yield diagnostic information with a minimum of roentgen dose. Even now the dose-information ratio that has been attained by Mr. Hammond's meticulous radiation surveys may be the lowest in the country.

The assiduous teaching activities of the members of the Department continue so that we present or participate in ten teaching hours each week. Postgraduate education in pediatric radiology for pediatricians and radiologists has long been a pleasant activity. Interest in this specialty has become very great indeed during the past five years and many are recognizing it as

the fundament of teaching, logically undertaken before the phenomenon of aging and degenerative disease is studied. The demand on the radiologists' time for lectures outside of the city has shown no sign of diminishing. Lectures have been given in Florida, California, British Columbia, New Brunswick and elsewhere. Papers given in Canada and overseas have resulted in the small award of honorary membership in the Canadian Association of Radiologists, the Royal Society of Medicine and in the Faculty of Radiologists of Great Britain. One lecture, given before the staff of the Hospital for Sick Children in Paris, was attempted in the French language. This was not thought to be one of our great successes. With this lesson in mind, commentaries at meetings in Rome and Stockholm were delivered in English. Lecture trips consume considerable time and much energy so that many enticing invitations have been reluctantly refused and these include invitations to act as visiting professor in New Zealand and Australia and trips to Central America, Brazil and Hawaii.

During the past two years some twenty research projects have been underway in the Department. Some of these have aborted, others brought to satisfactory conclusions so that members of the Department were enabled to present five papers at the Tenth International Congress of Radiology in Montreal and three before the recent American Roentgen Ray Society, and perhaps even more useful as a teaching means, some of these talks have been accompanied by scientific exhibits and by refresher courses. It is hardly worthwhile enumerating all of the studies that have been carried out in the Department during the past two years, extending as they do from very small studies in New England folk medicine such as lycopederdonosis to the



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explanation of the etiology of pneumonia in dysautonomia, to studies in the colon utilizing aerosol foams, and a whole group of studies carried out by the Division of Radiotherapy.

The Division of Radiotherapy has been particularly active, not only in patient care, but in research. Particularly interesting has been the continued study of the potentiating effect of x-radiation and chemical agents being studied in conjunction with the Children's Cancer Research Foundation, as well as studies of the effect of x-radiation and charged particles on human tissue. So that he can bring back new strength and knowledge to this very rapidly expanding field, Dr. Giulio D'Angio, radiotherapist, will be given a year's leave of absence to work in the radiation laboratories in Berkeley, California. We will miss Dr. D'Angio and look forward anxiously to his return, but are happy to report that Dr. Melvin Tefft will be carrying on as full-time radiotherapist during his absence.

The Department of Radiology itself never seems to be static. After more than fifteen years of service, Miss Winifred Campbell retires as Chief Technician to attempt the equally arduous role of lady of leisure. She gave faithful and loyal service and will be greatly missed. Intradepartmental reorganization is a continuing process in which we have no fundamental changes in philosophy to report, but all thirty-two members of the Department deserve our thanks and appreciation.

Edward B. D. Neuhauser, M.D.  
*Radiologist-in-Chief*

**House Staff**

Daniel J. Hanson, Jr.	Resident	7/1/61 - 12/31/61
Kevin G. Ryan	Assistant Resident	7/1/61 - 12/31/61
John F. O'Connor	Assistant Resident	7/1/61 - 12/31/61
Patricia A. McLellan	Affiliating Assistant Resident	7/1/61 - 9/30/61
Norman S. Williams	Affiliating Assistant Resident	10/1/61 - 12/31/61
Cesare Mazzucco	Chief Resident	10/1/61 - 6/30/62
Russell C. Briggs	Resident	1/1/62 - 6/30/62
James V. Roberts	Assistant Resident	1/1/62 - 6/30/62
Robert E. Gerth	Assistant Resident	1/1/62 - 6/30/62
Melvin Tefft	Affiliating Assistant Resident	1/1/62 - 3/31/62
Donald A. C. Malcolm	Affiliating Assistant Resident	3/1/62 - 5/31/62
Brian P. O'Malley	Research Fellow - Radiotherapy	7/1/61 - 6/30/62

## Statistics

Period Ending September 30, 1962

Diagnostic Patients 30,237

Films 86,399

X-ray Therapy Patients 3,049

Period Ending September 30, 1961

Diagnostic Patients 28,526

Films 81,378

X-ray Therapy Patients 2,728

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REPORT OF  
SURGEON-IN-CHIEF

Like all other Services in the Hospital, our activities can be divided into those of patient-care, teaching duties, and research. Some remarks are in order relevant to each of these.

A review of statistics shows that over the last fifteen years our annual patient-load has had a general upward trend. Indeed, the number of operations per year now is about double the figure of a decade ago. This accomplishment is somewhat remarkable in view of the fact that other children's surgical services have opened up and developed in the Greater Boston area, and that several additional men are devoting a large portion of their time to the practice of children's surgery in some of the general hospitals in and about Boston. It is obvious the various shifts which are occurring in the practice of our specialty in the New England region necessarily bring about considerable change in the kind of material which is referred to our Institution. The more common and simple operative undertakings can now be done safely in many other hospitals, whereas the more desperate and complicated types of cases tend to be sent here. There can be no question that this trend will continue, and that it will be more emphasized in future years.

In spite of the increasing complexity and seriousness of problems we must treat, the multiplicity of defects which some children possess, and the necessity for major surgery in many subjects who are premature (under five pounds), our total recovery rate has been astoundingly high. Over the country, services in adult general surgery usually show annual mortality rates of 2.5 to 3.0 per cent or slightly higher; it is universally recognized that mortality rates are always highest in groups of elderly people and of infants and children. We therefore look with considerable

pride on the fact that for the year July 1, 1961 through June 30, 1962, the total number of operations was 2,629, with a mortality rate of 2.16 per cent. This record is a great tribute to the diligence, skill, and supervision of our senior staff. Further, this could not have been accomplished without the superb group of House Officers we are fortunate to have, and it certainly could not have been brought about without the unceasing devotion of our dedicated nurses, who literally make the difference between life and death in many of the desperate struggles.

One of the most gratifying parts of my job as Chief is receiving the innumerable letters from parents — spontaneously written — concerning children who have been treated here. Some of these parents have lost a youngster, but even in their grief have taken the trouble to express appreciation for what was given in the way of therapeutic help, kindly gestures, and sympathetic understanding. Fortunately, most of these letters come from mothers and fathers whose sons or daughters have survived successfully a surgical ordeal, and there is profound gratitude for what has been done by our doctors, House Officers, nursing service, and other Hospital personnel. This warmth of feeling represents great strength and solid backing for our Institution.

The following is a monthly summary of operations:

## OPERATIONS

July 1, 1961 through June 30, 1962

	<i>Private</i>	<i>Staff</i>	<i>Total</i>
1961			
July	115	110	225
August	109	163	272
September	85	100	185
October	91	114	200
November	111	114	225
December	70	80	150



## 1962

January	98	114	212
February	93	123	216
March	103	116	219
April	99	129	228
May	105	134	239
June	122	136	258
Total operations	1,201	1,428	2,629

While our interests are broad in the general field of pediatric surgery, it might be well to point out some particular areas where, in the last few years, focusing upon a specific problem has increased our knowledge of a disease, improved our technical maneuvers in therapy, and led to reduced mortality and morbidity rates in handling the condition.

Appendicitis in children is common and is a serious threat to life. About half of the cases which come to us have already progressed to rupture and peritonitis. Yet there has been no mortality in the surgical care of these children; indeed, there has been no death from this condition in our Hospital during the last eighteen years.

In the past, a large number of children were seen with recurring urinary infection, hydronephrosis, or other serious conditions of the urinary tract. Many of these were given alleviation for the complication which presented at the moment, but the primary or underlying defect was not recognized. It has now become evident that a high proportion of these patients have, as their primary trouble, a partial blockage at the outlet of the bladder, which brings on, secondarily, the other destructive effects in the excretory tract above the bladder. Technical methods have now been devised to detect this obstruction of the bladder, and to relieve such blockage surgically. This is a tremendous advance in the understanding and handling of a large number of urological problems which

previously had baffled us. Already sixty such children have been brought to operation; this promises to be an excellent chapter in the advance of pediatric surgery.

Patients who have the more complex cardiac abnormalities and who are supported by an artificial heart-lung machine for the longer periods of time (one to two hours) are apt to develop some degree of "acidosis," which is a considerable derangement of the acid-base balance of the body. A new drug, "tris," has been thoroughly studied and has been found to be highly effective in relieving the acidosis promptly. This provides a very important addition to our armamentarium.

Through the untiring efforts and great contributions of Dr. William E. Ladd, this Hospital has long been interested in the treatment of esophageal atresia (which is a congenital complete block in the tube which should carry food from the mouth to the stomach). After a fatality rate of 100 per cent through the nineteen thirties, Dr. Ladd's first successful operative correction of this condition (indeed, the first successful one in the world) came in 1939. Following this, he made additional studies and advances which put this corrective operation on a very sound footing. These dramatic steps have now added up to the point where we can look upon two hundred children who have survived these repairs in The Children's Hospital! This is truly a phenomenal record and far surpasses any comparable series in the world. While the repairs have been placed on a very sound basis for babies weighing above five or six pounds, it has been recognized that such extensive surgery in premature babies of three or four pounds still leads frequently to failure. Therefore, in the last few years, we have changed our

approach and instead of attempting to make an immediate and total reconstruction in a tiny baby, we now "stage" it, performing a part of the repair in the first days of life, then completing the whole repair a few weeks later. This "staging" has already shown recovery rates which are about twice as high as they formerly were for premature babies.

In these times one hears and reads much in the medical and lay press concerning congenital anomalies in humans. There can be no doubt that continued and intensified efforts should be made to prevent these conditions, or to minimize their incidence; doubtless we will hear of advances in this direction. The fact remains that currently there is a job to do in reconstructive surgery, to cure or alleviate such conditions appearing in babies which are troublesome or which are an actual threat to life. An indication of the magnitude of the problem is shown by the fact that last year more than 1,000 patients were operated on for correction of some kind of congenital anomaly on our Service (obviously this figure would be further increased if we were to include material from the Orthopedic, Neurosurgical, and Otolaryngological Services).

One of the strongest segments of our general Surgical Service is the section on plastic surgery. Before the war, plastic procedures were performed here by literally a dozen different surgeons. Much of this was good, but it was often noted that for some conditions any one man was not able to build up enough material, judgment, and technical skill to handle the condition in the best possible way. Therefore, when I took over the Service in 1947, it seemed highly desirable to have all of the staff (including myself) give up this work and concentrate it in the hands of a single surgeon who could

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intensify his interest and devote his whole time to it, thus building up a unified group of cases and permitting this man to develop unsurpassed authority and skill in plastic surgery. We feel that in designating Dr. Donald W. MacCollum for this job an excellent step forward has been made. Further, for twenty-five years he has conducted in our Out-Patient Department a weekly plastic clinic which is a model of excellence in its following of patients, reporting to referring doctors, and giving supervision to a special group of cases. There has been no one, on any Service, who has been so faithful in personal attendance and management of a clinic over a period of two and a half decades. I feel confident that babies and children requiring plastic surgery are getting top-flight service. Some idea of the extent of these activities can be gained by the following statistics, which are average figures per year, drawn from summaries of the last three years of work, indicating our Out-Patient clinic load and the in-patient operations.

Patient visits in plastic clinic	1,637 per year
Patient visits in Vermont clinic (which we run)	240 per year
Patient visits, private office	1,900 per year
<hr/>	
Total patient visits	3,777 per year
New cases (clinic and private)	628 per year
<hr/>	
Operations, various plastic procedures	388 per year
<hr/>	
Letters to doctors referring patients	2,385 per year

We have been particularly interested in building up our work in

urology. There are a great many cases in this area in infancy and childhood. They include a fair number of youngsters with neoplasms, but most of the cases represent some congenital anomaly of the urinary or reproductive tract, oftentimes with other sequelae (such as infection) grafted on the abnormality. The urological clinic in the Out-Patient Department has long been a busy unit, with various members of the staff working there. To give this a more permanent direction and controlled management, we have appointed Dr. Judson Randolph to be its chief. The quality of supervision in this clinic has vastly improved in the last few years, and I now feel we are offering children the very best care that is available in current urological therapy.

We have been happy to unite with the urological training program of the Peter Bent Brigham Hospital, so that now, at all times, we have one of their Senior Residents with us on a full-time basis. This improves the coverage of our patients in this field, and simultaneously provides a man in urological training with a body of pediatric material, such as is rarely available in other urologic training centers.

In the last year there were 865 visits to the out-patient urological clinic. Another estimated 870 visits were made in private offices of various surgeons in the Hospital, making a total of about 1,735 visits of a urological nature. In the operating rooms there were a total of 95 cystoscopies and 338 urological operations performed during the year. Conditions operated upon were as follows:

Undescended testis	69
Hypospadias	50
Bladder-neck obstructions	29
Uretero-pelvic obstructions	11
Exstrophy or epispadias	13

Ileal conduit	16
Neoplasms	25
Sexual abnormality	16
Trauma	4
Torsion of testis	5
Ureteral reflux	4
Hydronephrosis	9
Double ureters	7
Uremia	2
Incontinence	4
Ureterocele	2
Cystic kidney	10
Urethral stricture	14
Phimosi	19
Bladder foreign body	2
Neurogenic bladder	5
Horseshoe kidney	4
Double urethra	1
Agnesis of testis	2
Meatal stenosis	1
Nephritis	4
Urethral fistula	4
Non-functioning kidney	3
Hypertension (nephrectomy)	1
Urethral valves	1
Urinary retention	1

We can look with satisfaction on the several segments of our programs of training for students and doctors. We give *second-year* students a series of exercises designed as introductions to methods of physical examination, stressing the kind of pathological processes which are apt to be found in infancy and childhood. All *third-year* students in the Harvard Medical School come to this Hospital for a period of five to six weeks for teaching in pediatrics, including its manifold aspects. During this time, we give weekly conferences and demonstrations which allow us to lay before students the more common conditions which a surgeon must handle, stressing points relative to recognition and diagnosis, but only outlining the surgical steps in therapy, and summarizing the results which can be expected. For *fourth-year* students we have a voluntary

course, and each month through the year two men come to us and become an active part of the House Staff. Being on constant duty for a month permits them to be exposed intimately to all activities within the Department. There is no better way to get a good introduction to surgery than by admitting patients, helping at the operating table during the surgical procedures, and taking a part of the responsibility for management of a child during the postoperative period. Students have been very enthusiastic about this course.

Our House Staff consists of twelve men, arranged in a pyramidal order, with increasing responsibility as they ascend the pyramid. At the base of the pyramid are six Assistant Residents, each of whom spends one year at The Children's Hospital as a part of a three-year combined appointment at the Peter Bent Brigham Hospital, West Roxbury Veterans Hospital, and The Children's Hospital. This has proved to be an extremely desirable way of giving a broad basis in surgery to young men. At the intermediate level in our pyramid are five Residents, each man being with us for two years, a new man coming on each six months. These men have all previously had at least three or four years of surgery elsewhere, and some of them have had more than this. They come from numerous academic centers around the country. These Residents have a high degree of responsibility and the arrangements are such that we have been able to provide them with an excellent training during the period. At the apex of our House Staff training is a Chief Resident, who holds this post for one year. He is a man who has had six or seven years of surgery since graduation from medical school. I have nothing but the highest regard for these men. They are a superior group,

taking full advantage of the educational opportunities that we can offer, and obviously contributing greatly to the efficient and satisfactory running of our Hospital.

In the area of research there has been an intense interest and activity in a number of subjects. Our research laboratory, modernized and enlarged a few years ago, has amply fulfilled our dreams for establishing such a unit. It is arranged and equipped in an excellent manner, and provides an ideal place for the study of a wide variety of questions, the solution of which will enhance our ability to handle the baffling surgical problems presented to us by babies and children in the Clinic. The laboratory is building up a sound financial backing from several outside sources, completely divorced from general Hospital funds. The staff is growing in a very satisfactory way. We can carry on research, not only in areas of cardiovascular interest, but can extend activities to include a number of other areas of investigation which relate to problems in general pediatric surgery.

Because of widespread interest through the country in a recently-developed technique of resuscitating individuals who have had cardiac arrest by giving external repeated pressure on the anterior chest wall, a number of studies have been undertaken in the laboratory to measure the efficacy of this technique. It has been shown that the blood pressure can be maintained, and that there is a satisfactory distribution of blood throughout the body. Other measurements have been made which are of interest and importance to doctors, who might be called on at any moment to use this method of resuscitation.

Looking toward the future, it is our hope to extend important observations first made by Boerema of Holland

that subjecting an animal or human to increased atmospheric pressure has certain very striking benefits, particularly when there is impairment of efficiency in the respiratory or circulatory apparatus. These observations open up a whole new vista of possibilities for giving temporary relief to those youngsters we see with advanced pulmonary or cardiac lesions, who have some hope of permanent survival if we can get them over their current crisis. In the entire world, there are only a half dozen large compression chambers, since these are extraordinarily complicated and are expensive to build. Fortunately, such a chamber exists in the adjacent building of the Harvard School of Public Health, and through a contractual agreement we were able to use this facility extensively for important and medically profitable activities. Increased demands on the chamber by the School of Public Health for other, equally-important research, however, have led C. H. M. C. to take steps to acquire a facility of its own. Having unlimited access to a high compression chamber will give us an opportunity of great rarity and importance. Indeed, the observations and studies which have been made in the pressure chamber to date will undoubtedly be of vast importance to us in the future handling of some of the desperate pulmonary and cardiac problems which we often have to face in youngsters.

The following is a list of recent publications from the Department which we look upon as work well done, well summed up, and published so that the benefits of our findings can be made readily available to other interested persons throughout the country. In addition to this bibliography of forty papers which have already appeared in print in the last two years, there are twenty others



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which have been submitted to various scientific journals and are in the process of publication.

Robert E. Gross, M.D.  
*Surgeon-in-Chief*

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## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

# REPORT OF ANESTHESIOLOGIST-IN-CHIEF

During the past year the Anesthesia Department has continued to consider better patient care as its principal aim. To attain this, however, has entailed a much more diversified approach than heretofore, since it has included not only development of improved clinical techniques, wider teaching activities, and more active investigation, but has also included reorganization of the Department and its establishment as an independently functioning unit. The latter steps, through development of greater strength at the top and more sound organization, will provide better medical care as well as greater functioning efficiency as an economic unit.

## Personnel

Due to the ever-increasing number of exacting operations that are undertaken at this Hospital, it has been necessary to increase the number of full-time physician anesthesiologists. At present our clinical, teaching, and administrative responsibilities are shared by four anesthesiologists, who show the following record:

	<i>Joined C.H.M.C.</i>	<i>Board Certified</i>
Robert M. Smith, M.D.	1/1/46	1951
John B. Stetson, M.D.	7/1/59	1960
John G. Adams, M.D.	10/1/61	1961
Dean Crocker, M.D.	7/1/62	

The Anesthesia Department is now running on the policy whereby at least one of the above senior Staff men is on duty in the Hospital at all times of the day and night, thus insuring the best possible coverage for patients and surgeons.

Nurse anesthetists have always played an important role in this Hospital, and although their number has decreased, their value is still great. At

present Miss Betty Lank, with twenty-eight years of consistent service, and Mrs. Patricia Jackson contribute significantly to the efficiency of the Department. It is hoped that more nurse anesthetists of their caliber can be added to our staff.

Residents and graduate Fellows have been trained in our Department for the past fifteen years. Most of the Residents come for periods of three or four months on a regular rotation during two- or three-year training programs at the Peter Bent Brigham Hospital, Lahey Clinic, Massachusetts General Hospital, Massachusetts Memorial Hospitals, U. S. Naval Hospital at Chelsea, and the Jackson Memorial Hospital in Miami, Florida. In addition, other hospitals send men at chosen intervals. Graduate Fellows spend six months to one year at this Hospital following completion of their regular residency. To date over 300 Residents and Fellows have received training in pediatric anesthesia in our Department. Due to teaching facilities and the excellent cooperation of the Surgical Service, the opportunities for experience in all types of anesthesia for children are unique.

## Clinical Activity

The number of anesthetics administered during 1961 was 5226. This figure has undergone remarkably little change during the past several years, reflecting the relatively unchanging state of the total Hospital census. The surgical procedures for which anesthesia is required have undergone considerable change, however, of both evolutionary and revolutionary nature. It has been inevitable that procedures once performed only in this Hospital would be adopted elsewhere in gradually increasing numbers. This has occurred in many categories of surgery, narrowing our work down until it



becomes limited to the more difficult cases in each category. The resulting loss is compensated for only by introduction of other surgical advances. In general, the trend has been to see more patients with complex lesions and to attack problems earlier in infancy, both of which create added concern for the anesthetist. The revolutionary changes that have occurred have been related largely to the field of open-heart operations. This type of surgery has naturally offered a challenge to the anesthetist, and confronted him with new demands in relation to minimal depression of an over-burdened heart and proper methods of respiratory support during and after operation.

In an effort to keep pace with our ambitious surgeons we have been concerned in development of better anesthetic agents and apparatus; in methods of safeguarding and supporting patients during operation, especially in the prevention and treatment of shock; and in assisting postoperative recovery. In the field of new anesthetic agents two drugs, halothane and methoxyflurane, have gained acceptance in adult anesthesia due to their non-explosive and less irritating qualities, and we are investigating their use in infants and children.

For greater safety during pediatric anesthesia the continual use of a stethoscope, specially constructed blood pressure apparatus, and a constant recording thermometer has become standardized and has been found to be of surprisingly great importance.

In the event of operative hemorrhage, greater survival has resulted from combined use of special blood pumping apparatus and freshly prepared blood, which has been warmed prior to administration, the addition of calcium, and in some instances an organic buffering agent tris(hydroxymethyl)aminomethane (tris buffer).

During the past year considerable attention has been placed in the field of oxygen therapy and respiratory assistance. Increasing use of mechanical ventilating devices has necessitated organization of this form of therapy, and we have been fortunate in securing the services of an experienced nurse, Miss Evelyn Cassara, who has accomplished much in a relatively short time. In addition to caring for surgical patients, consultant and therapeutic services are rendered and resuscitation taught throughout the Hospital.

A formal program of laboratory investigation still awaits better building facilities. In the meantime, research is carried on at a clinical level. It is hoped that greater facilities will soon be available.

In an effort to contribute to the teaching of pediatric anesthesia, members of the staff have recently made four trips to Europe and South America, and have lectured in twenty-five cities in North America.

Robert M. Smith, M.D.  
*Anesthesiologist-in-Chief*

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### REPORT OF DENTIST-IN-CHIEF

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The clinical activities of this Department have continued at peak capacity. The total number of out-patient visits exceeds 10,000. House patients served, including 150 strictly dental admissions of 48 hours or more, number 175. About 300 patients requiring general anesthesia for dental extractions have been served in the Surgical Out-Patient Department. The courtesy of the staff of that Department and the superb service and cooperation of the Department of Anesthesiology makes possible this needed service to the community. Consultations requested by other Departments of the Hospital exceed 125, and approximately 50 patients have been referred from outside practitioners and other community hospitals for diagnosis and plan of treatment. "Off" hour emergency care of casual patients at night and on weekends is rapidly increasing to the point of becoming burdensome; these patients numbered more than 150 this past year. In our opinion, this is a reflection of the general community need of increased dental services, emphasizing the problem of our eventual place in the community as a service unit.

Special clinical services such as care to handicapped children unable to receive routine chair service in outside practices because of crippling diseases continues to be a major obligation of this Department.

One of the most important of our special responsibilities is the care and guidance of patients sustaining cleft palate. There are now approximately 150 to 175 cleft palate patients receiving treatment and another 200 under observation with treatment carried out elsewhere but supervised by the Dental Department. Under the attention of Dr. Lennard Swanson, plans for improved service for these patients as well as vastly needed re-

search into the problem are hopefully reaching fruition.

Our greatest pleasure in being a part of a large general hospital for children is the splendid teaching material which is constantly available. With two interns, four postdoctoral students in part-time attendance throughout the year, and one predoctoral student throughout the academic year from the Harvard School of Dental Medicine, our constant annual need for new clinical material, as well as long-term patients, is adequately met by our present organization. We take pride in our teaching privileges and appreciate the opportunities afforded.

We hope and believe the "each one, teach one" principle of education reaches the doctors in training in other Departments as well as the student nurses and other trainees in allied health fields. One of the most satisfying efforts of our teaching privilege is the short course offered the postgraduate students in pediatrics from Harvard Medical School. Our Staff has also met the normal demand this year for "refresher" clinics to professional groups as well as essays and contributions to the dental literature.

The continuing need for increased research activities is annoying because of our ineffectiveness. Procurement and financing of adequate personnel is the chief barrier. Financing of specific problems would probably not be too difficult if the salaries of professional personnel were not dependent on income from clinical services. We hope for some help soon on this problem.

Our present research interests are centered on regulatory care of cleft palate patients, relation of dental development and facial growth, environmental dietary control of dental decay, and electrophoretic investiga-



## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

tions of human saliva—a paltry effort compared to the opportunity.

With pride and regret we record the leaving of Dr. Charles Boyers from our senior professional Staff. He has gone to Buffalo to serve as Professor of Pedodontics at the University and to become Chief of Dental Services at the Children's Hospital there. Dr. Boyers was replaced by Dr. Terrence Hoover. Dr. Robert Watton, a graduate of our service in 1961, has continued his education at Tufts and will rejoin us next spring.

Finally, I would like to point out the need of increased support for our teaching and research efforts. To repeat, we have a *real* need of outside support for development of research personnel. If this effort is successful, we will have more need for laboratory space, and I feel sure the Planning Committee will show confidence in our development and assign us space in the projected new laboratory and out-patient building. Dental disease is by and large prosaic and unromantic and therefore has little appeal for fund raising, but any illness which causes the discomfort and economic waste that this disease does deserves the attention of all public welfare-minded people. We are frankly suggesting that a good investment in medico-social needs can be made in the Dental Department at The Children's Hospital Medical Center.

Paul K. Losch, D.D.S.  
*Dentist-in-Chief*

## OPHTHALMOLOGIST-IN-CHIEF

**REPORT OF  
OPHTHALMOLOGIST-  
IN-CHIEF**

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During the past year, efforts have been made to reorganize the Department. It is hoped eventually that this Department will play an important role in the Harvard Medical Center. The Massachusetts Eye and Ear Infirmary under its new chief, Dr. David Cogan, has agreed to rotate a Resident through The Children's Hospital Ophthalmology Department. This Resident rotation plan may not be available for several months, and an ad hoc committee has been appointed to make recommendations for the reorganization of the Department. The present members of the Department are endeavoring to assist this committee. It is realized by all that such a reorganization must include plans for the sharing of expensive equipment and diagnostic facilities and even personnel with other members of the Harvard Medical Center. We would welcome the suggestions and the support of our colleagues in other Departments of The Children's Hospital Medical Center.

Trygve Gundersen, M.D.  
*Ophthalmologist-in-Chief*

## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

### REPORT OF OTOLARYNGOLOGIST- IN-CHIEF

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The activities of this Department have continued much the same as in the past. We are hampered by the same lack of facilities which confronts the other Services and have similar problems in our Out-Patient Department as well as in the affiliated Hearing and Speech Clinic. Improvement of our Out-Patient Clinic is essential if we are to keep pace with the plans for generally augmenting the Hospital's Out-Patient services. It is reassuring to know that our needs are being taken into consideration by the planning committee and that these deficiencies will be remedied when new construction is undertaken.

We have made a real effort to increase the use of our beds, but there are certain inescapable difficulties, one of which is the seasonal nature of much of our work, which leads to an unevenness in Hospital admissions. Usually, from the middle of August to the latter part of October the Service is slow. After this time, as respiratory infections become increasingly prevalent, the Service can be very busy. During the past winter our three high humidity croup rooms were in constant use on many occasions, and on several there were two patients in each room, so great was the demand. These rooms are special purpose areas and are not really suitable for general use. However, although we use them only six or seven months a year, they are absolutely indispensable in the care of patients with severe respiratory infections, laryngeal obstruction, and after bronchoscopy or tracheotomy. This is one of the numerous small reasons why running a Hospital of this kind is such an expensive proposition.

The resident training program with the Massachusetts Eye and Ear Infirmary continues to function well. The maturity and high professional quality of the young men participat-

ing in this program reflects great credit on their parent institution. We certainly hope our affiliation will continue to prosper. Dr. Sydney Shore, who is Chief of the Otolaryngology Service at Peter Bent Brigham Hospital, has recently been made a member of our staff.

#### HEARING AND SPEECH CLINIC

Since July of 1962 this Clinic has been under the direction of Dr. Allan C. Goodman, formerly of Washington University, St. Louis, Missouri. Dr. Goodman's former position was that of Assistant Professor of Audiology in the Department of Otolaryngology. He has had wide experience in the field of hearing and speech problems and a special interest in the hearing apparatus in relation to neurological disorders. In November of 1962 Dr. Goodman spoke before the American Speech and Hearing Association on "Audiological Signs of Intracranial Lesions." Miss Lois H. Averell, Speech Pathologist, resigned in order to continue her doctoral studies at Boston University on a full-time basis.

The Sarah Fuller program continues to function at capacity. There are now forty-five pre-school children, all with severe degrees of deafness, receiving instruction by highly qualified teachers. We have a waiting list for this program, partly because of the inadequacy of our present quarters. The Hearing and Speech Clinic is one of the most congested areas in the Hospital and is badly in need of new quarters.

Carlyle G. Flake, M.D.  
*Otolaryngologist-in-Chief*



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## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

### REPORT OF CHAIRMAN, STAFF PLANNING COMMITTEE

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A new vitality, which can be felt throughout The Children's Hospital Medical Center since the appointment by the President of the Board of Trustees, William W. Wolbach, of Dr. Leonard W. Cronkhite, Jr., as General Director, is recognizable also in the deliberations of the Staff Planning Committee. Plans born of the accomplishments and dreams of members of the Staff, which have lost luster during recent years of inactivity as a consequence of concern with causes and remedies of Hospital deficits, have taken on fresh color. The eight Chiefs of Staff of The Children's Hospital Medical Center constitute the Planning Committee, which has had continuity in one form or another since 1931. The present members are Drs. Randolph K. Byers, George E. Gardner, William T. Green, Robert E. Gross, Charles A. Janeway, Donald M. Matson, Edward B. D. Neuhauser, and the Chairman. The General Director is an ex officio member and serves as Secretary.

In a previous publication, the Planning Committee described The Children's Hospital Medical Center in the following words:

"The plan that created The Children's Medical Center called for the gathering together, within one organization, of all aspects of Medicine, Surgery and the Laboratory Sciences that concern themselves with the normal and the sick infant, child, and adolescent. The pattern of centralization, encompassing a flexibility in the manner of merger or affiliation, has permitted institutions interested in children to join together and, in so doing, not only create a great medical center but strengthen themselves. Some developments in this direction have exceeded all expectations in the dimensions of the programs achieved—for example, the Judge Baker Guidance Center and the Children's Can-

cer Research Foundation. These two institutions and the Children's Mission to Children, which is concerned with social aspects of child care, are independent corporations affiliated with The Children's Hospital, the Infants' Hospital, and other units comprising the more unified administrative structure known as The Children's Hospital Medical Center.

"This C. H. M. C. structure contains the facilities for bed care and most of the ambulatory services, and it houses the Departments of Radiology and Pathology, the Laboratories of Clinical Pathology, and most of the research activities of the clinical departments. Harvard Medical School carries out the major part of its pediatric teaching function in The Children's Hospital or through the Hospital's affiliates. There are also close relations—physical, spiritual, and intellectual—with the Peter Bent Brigham Hospital, which is connected with The Children's Hospital by a bridge over Shattuck Street. A similar bridge joins the Hospital with the Children's Cancer Research Foundation, which in turn connects through a door with The House of the Good Samaritan. The Judge Baker Guidance Center is joined to the Hospital by a tunnel."

In the 1959 Planning Committee Development Program, for the ten-year period to end with the One-Hundredth Anniversary of the Hospital in 1969, three priorities were delineated:

#### Ambulatory Services

The ambulatory services were selected as a priority of greatest importance, in recognition of the consistently increasing contribution to the care of children, as well as to teaching and research, which is made by the Out-Patient Department. The Committee, therefore, recommended the building of new physical facilities for ambulatory serv-

## CHAIRMAN, STAFF PLANNING COMMITTEE

ices, not only to provide far better care for the steadily increasing numbers of children and adolescents who require such services, but also to permit the extension of the horizons of clinical research, medical education, and postgraduate training. We are delighted that in the first series of plans now being completed, proper provision is made for these vital services.

### Clinical Research Facilities

Long before the enormous and, to many people, completely unexpected growth of support of medical research throughout the country by the Congressional Appropriations to the National Institutes of Health, the Planning Committee outlined the possibilities for important contributions to the care of the patient and to the prevention and eradication of disease that could be made in The Children's Hospital, and later in its Medical Center, if adequate facilities for both basic research and clinical investigation could be created. Great changes have indeed been made in many parts of our Hospital enterprise with first priority properly given to the creation of better clinical facilities. The greatest laboratory development has taken place in our affiliated Children's Cancer Research Foundation. A structure adequate for clinical investigation connected directly with our wards in the Farley Building is still lacking. The support of clinical investigation has been recognized as a need of first priority in the National Institutes of Health and in the several voluntary health agencies which give important support to medical research.

The needs for expanded facilities for clinical research are evident in every Department and Division of The Children's Hospital Medical Center. To add to the research space needs of all previously existing Departments, there is the requirement for proper space to

house the important research activities of the new Bronson Crothers Professor of Neurology, and for new specialized services, such as ophthalmology and dermatology.

The *second recommendation* of the Planning Committee is still the *construction* of facilities for *clinical investigation*.

### The Development of New and Specialized Services

The Planning Committee in 1960 selected child neurology as the field of greatest importance for immediate development. At the request of the President and the Board of Trustees, this Committee recommended the creation of a Division of Child Neurology to be named for the late Dr. Bronson Crothers, as the most important use to which a generous gift to the Hospital could be put. By arrangement with Dean George P. Berry of Harvard Medical School and Mr. Wolbach, the Bronson Crothers Professorship of Neurology was created, and the first incumbent was appointed July 1, 1962. The brilliant and promising career of Dr. L. Lahut Uzman, the first professor, was brought to a tragic and unexpected end several months after he began work. The story of his brief, extraordinary career has been told elsewhere (The Harvard University Gazette, Vol. LVIII, No. 38, June 8, 1963).

Dr. Charles Barlow, one time Resident here at Children's, has been appointed to this important professorship. His coming is awaited with eagerness and with appreciation for the role that he will fill in the development of child neurology at the Harvard Medical School and at The Children's Hospital Medical Center. This new Department will begin in borrowed laboratory space, and in clinical facilities the inadequacy of which can not be remedied until there

is new construction.

There are other specialized services which are receiving special attention by the Planning Committee. Investigation has been going on for the past year, with the aid of Dr. Trygve Gundersen and the Department of Ophthalmology of Harvard Medical School, toward the creation of a Clinical and Research Division of Ophthalmology. Similar studies are going on in the field of dermatology.

In all parts of The Children's Hospital Medical Center there is a great need for general strengthening in depth of the professional personnel. Considerable progress has been made during the past year, particularly through the vigorous assistance given by Dr. Cronkhite. Much can be done to strengthen what we are now doing by utilizing to the full the resources presently available. Greater strength beyond this would require additional support from both private and Government sources. Here again, strengthening in depth requires space adequate to care for the activities of an enlarged Staff.

### The Harriet M. Peabody Professorship

For some years the Trustees of the New England Peabody Home have investigated the possibilities for new and more effective use of their resources. Their contribution to the care of the crippled child has been a notable one. This Committee recommended to our President and his Board that continuation of the historical role of the New England Peabody Home could be accomplished most effectively by strengthening our Department of Orthopedic Surgery at a crucial point in its development. Through a series of negotiations conducted with imagination, statesmanship, and vision by Dean George P. Berry, of the Harvard Medical School, and Mr. Wolbach



## REPORTS OF CHIEFS OF THE MEDICAL SERVICES

with the Trustees of the New England Peabody Home, it became clear that the greatest added strength to orthopedics at The Children's Hospital and at Harvard Medical School could be obtained by the creation of a full Professorship of Orthopedic Surgery for the first time in our Hospital, with appropriate budgetary support of this Chair. This program was the final choice of the Trustees of the New England Peabody Home. The Planning Committee had the opportunity to participate in the search for the first incumbent and gave hearty approval to Harvard's appointment to Dr. William T. Green as the first Harriet M. Peabody Professor of Orthopedic Surgery at The Children's Hospital. This marks an important milestone in our plans for strengthening the Departments and Divisions of the C. H. M. C.

The Committee expresses its great pleasure that Dr. Green has been given the opportunity to create the foundations of the Department of Orthopedic Surgery of tomorrow and to bring into reality the achievement of important goals toward which he has been working with such dedication for more than thirty years. We once more express our gratitude to the Trustees of the New England Peabody Home for their generous action which has made possible the beginning of a new era in the long and distinguished history of Orthopedic Surgery in The Children's Hospital Division of the Orthopedic Department of Harvard Medical School. We hope that they will derive deep satisfaction from the great advances which are certain to come from the developments which they have made possible. We congratulate Dr. Berry and Mr. Wolbach on this important contribution to the strength of the total fabric of Harvard medicine.

### **The Harvard Medical Center and the Affiliated Hospitals, Inc.**

The planning for the development of a Hospital Complex, under the auspices of the newly created Affiliated Hospitals, assumed a much more optimistic outlook with the announcement that Dr. Robert Glaser had accepted the Presidency of this new organization. The C. H. M. C., which is a founding member, has done everything possible to encourage the rapid fruition of these plans, even to the extent of delaying important decisions concerning the construction of badly needed facilities. The Planning Committee once more emphasizes its desire to have the C. H. M. C. a part of this great hospital enterprise. There is an enormous opportunity to give better patient care, to do better teaching, and to carry out more effective research by combining many activities with the larger group. Once more the Planning Committee emphasizes that when all efforts to combine services are finished, there will remain an organization devoted primarily to the infant, the child, and the adolescent: The Children's Hospital Medical Center. We still believe that in the future, as in the past, our greatest contribution will be made if we continue as a separate Institution, identified with child care, but working in the closest possible harmony and co-operation with the several adjacent hospitals for adults, and always within the magnificent academic setting of the Harvard Medical School, the School of Dental Medicine, and the School of Public Health.

### **The C. H. M. C. Construction Program**

The necessary preoccupation with deficits of the past several years and the justifiable stress placed upon the provision of paramedical and administrative facilities should in no way detract from the urgency of our need

for new facilities for clinical investigation and ambulatory services. There should be no competition between these two classes of construction needs of the C. H. M. C. Without parking facilities, for example, it is impossible to continue to give proper service to patients in our Hospital. The need for hotel, motel, apartment, and commercial services for the good of the Staff and the families of our patients has been apparent for many years, and provision of such facilities is in line with the advanced thinking in a number of hospital organizations in this country. We applaud the vigorous and imaginative efforts of Dr. Cronkhite in these endeavors.

The Planning Committee is appreciative of the business competence and imagination displayed by Mr. Wolbach, the Trustees, and the General Director, and we express our appreciation for these heart-warming evidences that the breath of life is being blown into dreams and plans which have reposed too long in the deep freeze of economic uncertainty. As Chiefs of Staff, we are happy with the evidences of total planning now visible on the drawing board. We must emphasize that while we hope all of these plans can be put into effect within the next few years, if there must be a choice in priority because of restriction of funds, our recommendations are clear. We describe these as follows: The provision of the most essential services for the running of the Hospital, including such external needs as the parking facility; and, the construction in the shortest possible time of the buildings for ambulatory services and clinical investigation. Without these the new clinical facilities in the Farley Building stand alone, emphasizing all the more our deficiency in facilities for ambulatory services and for clinical investigation.

## CHAIRMAN, STAFF PLANNING COMMITTEE

We have complete confidence that the time is ripe for the fulfillment of these recommendations, and, as a Staff, are prepared to give every support to the Trustees, as we have in the past, in the achievement of these goals.

The Staff Planning Committee would like to acknowledge here the devoted and effective efforts of Mr. Greer Williams who served the C. H. M. C. in many capacities and for a time as Acting Director. We are grateful to him for his many important accomplishments during his tenure and wish him all that is good in his new professional activities.

Sidney Farber, M.D.  
*Chairman, Staff Planning  
Committee*





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## DIRECTOR, EMPLOYEE HEALTH SERVICE

# REPORT OF DIRECTOR, EMPLOYEE HEALTH SERVICE

There have been several changes in Health Service physicians since the department's inception in January, 1959. We were fortunate in obtaining Dr. Morton Franklin on September 1, 1962, who brings to the department a wealth of clinical experience, a keen interest in the individual employees' problems, and the recognition for the need to develop more clearly defined and beneficial policies.

As the attached statistics indicate, the functions of the department are diversified in scope; pre-employment physical examinations, medical health visits, immunization programs, first aid for industrial accidents, referrals to adult hospitals and to private physicians. These areas comprise a large part of the service but do not indicate the expenditure of time of both physician and nurse in counselling and assisting in solving the many social problems that are attendant to the employees' physical illnesses nor do they indicate the considerable amount of time required for home and/or hospital visiting.

In addition to the health program maintained for employees, medical care is rendered to the medical House Staff by Dr. Robert MacMillan. He has given an immeasurable service to the staff, arranging hospitalization, home visiting and telephone consultations, referrals to specialty services and processing of applications for the armed services and future hospital appointments.

Assisting Dr. MacMillan and Dr. Franklin has been a pleasure and it has been particularly gratifying to participate in the growth of the department. Services to employees and House Staff have increased over fifty per cent in a three-year period so that it has become increasingly difficult to operate in the space originally provided for this unit. Not only has the Health Service grown

but the increased staff and activities of the Personnel Department, where we are located, has caused the loss of an examining room. The waiting room area does not provide adequate seating space for the prospective employees and for those persons seeking health service.

As we look to the future, it is hopefully anticipated that the Employee Health Service will continue to increase its service to the employees of The Children's Hospital Medical Center and that appropriate accommodations more conducive to the privacy and operation of such a service will be forthcoming.

Miss Hester E. Macuen, R.N.  
*Director, Employee Health Service*

STATISTICS FOR EMPLOYEE HEALTH SERVICE	
Physical examinations	530
Certified for employment	115
Medical visits and health checkups	1143
Nursing visits and consultations	2032
	<u>3820</u>
Immunizations	470
Referred for x-ray—CHMC	38
Referred for laboratory studies	29
Cultures	211
Referred to Private Physicians	56
Referred to Peter Bent Brigham Hospital	45
Referred to Other Hospitals	13
Referred for electrocardiogram	3
Minor Industrial Accidents treated	42
House Staff seen by Dr. MacMillan	414
	<u>5141</u>



## REPORTS OF ADMINISTRATIVE DEPARTMENTS

**REPORT OF DIRECTOR,  
MEDICAL RECORDS  
DEPARTMENT**

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The Medical Records Department continues to have its activities continually increased both with respect to records pulled for clinical purposes and those for research. The perennial lack of adequate space for operations continues to impede the centralization of certain operations which would increase the efficiency of the Department. It seems impossible to correct this situation until the new Interface Building becomes a reality and is located more centrally and in closer approximation to the Admitting and Accounting areas. One more year of medical records was micro-filmed in March of 1962 and has now been completed. It should be noted, however, that micro-filming by this plan, i.e., the annual retirement to micro-film of one year's records, is not adequate for keeping pace with the constantly increasing demands for filing space necessitated by ever increasing records. Some other solution to this space problem must be sought and one thinks of two alternatives as being most effective, the first being the retirement to micro-film or dead storage of Nursing notes which do not form a very considerable part of Hospital records, and the second, an increase in the number of records micro-filmed.

During the months of June and August a further transfer of Hospital records to the basement of Peabody House, off Binney Street, was completed. On July 1st, Mrs. Marie Smith, who had served so ably as our Chief Medical Records Librarian, resigned in order to take an equivalent post at the Greenwich Hospital, Greenwich, Connecticut.

A number of the Department personnel participated in training programs and as usual, a student from the Massachusetts General Hospital came to us for one month of training in April. The Department continues to

be plagued by a fairly heavy turnover for a variety of reasons, and in keeping with experience in other parts of the Hospital and other institutions in the area, there is continuing difficulty in obtaining secretarial personnel. The Department is looking forward to the appointment of a new director at the earliest possible moment.

Miss Betsey Loveland  
*Acting Director, Medical  
Records Department*

## DIRECTOR, MEDICAL RECORDS DEPARTMENT

## STATISTICS 1961-1962

Comparative Totals 1961 and 1962:				1961	1962
Tabulated Requisitions—Records Pulled				<u>75,097</u>	<u>80,209</u>
(Excluding Department use and Research)					
Telephone Calls		1961	1962		
		<u>45,553</u>	<u>50,398</u>		
Records Pulled for Research				6,110	10,420
Patients' Index—tabulated calls				52,864	54,527
New Records Issued				14,842	15,781
Discharged*				9,011	9,619
Total Operations (Including Throat)				5,041	5,513
Correspondence (Requests handled)				5,428	5,539
Income					
		1961	1962		
		<u>\$3,069.00</u>	<u>\$2,855.00</u>		
Photostating (pieces)				8,118	12,516
Inter-Departmental Transfers					
		1961	1962		
		<u>\$201.95</u>	<u>\$104.65</u>		
Crippled Children—authorizations				666	681
Records Taken to Court				40	25

\**Explanatory Remarks:* The items Discharged and Total Operations represent the work of the collating clerk in preparing the records plus the work of the entire secretarial section involving transcription and transmittal for signature. The total number of records pulled and calls to the Patients' Index, as shown, do not represent the total amount of work actually performed, since it is impossible to tabulate all requests actually completed.

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

# REPORT OF ADMINISTRATIVE ASSISTANT IN CHARGE OF AMBULATORY SERVICES

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Again during the period October 1, 1961 through September 30, 1962, as in the past four similar periods, the Out-Patient Department showed a significant increase in the total number of patient visits. During the 1962 period 109,317 visits were recorded, an increase of 8,208 over the same months of 1961, and almost 13,500 visits more than in the 1960 period.

To an ever-increasing extent the emergency clinic facilities of the Department are being utilized. Of the 8,208 additional visits recorded in 1962, 4,207 were to the Medical Emergency Clinic, 756 to the Surgical Emergency Clinic, and 647 to the General Emergency Clinic. Thus, emergency visits of one nature or another accounted for well over fifty per cent of the patient visit increase.

In the clinics of a non-emergency nature, both Medical and Surgical Out-Patient Clinics showed increases, while the Orthopedic Out-Patient Clinic had a decrease in total patient visits. Medical rose to 17,799 visits, an increase of about 1,100 from the previous year, while Surgical showed an increase of about 1,250, reaching 15,954 visits. The Orthopedic drop was by 268 visits, to a total for the year of 13,827.

Although total patient visits is one measure of the volume of activity in an out-patient department, the number of *new* patients is also an important figure for consideration. During the 1962 period, this figure increased by ten per cent, up from the 1961 high of 11,699 to 13,184 for 1962. As would be expected, the emergency clinics accounted for the largest proportion of the increase, again more than fifty per cent.

Although the total patient visits for the Orthopedic Out-Patient Clinic decreased, as mentioned above, the number of new patients rose from 1961 to 1962.

Special clinics showing increases in total visits include the following: Adolescent, Cerebral Palsy, Child Health, Hearing-Speech, Physical Therapy, Psychiatry, Arthritis, Endocrine, Follow-up Medicine, General Medicine, Hematology, Nephrosis, and Seizure.

In the Surgical Out-Patient Clinic, the number of operations performed on clinic patients decreased sharply, from 1,951 during 1961 to 970 for 1962. But at the same time the number of private patients undergoing surgery in the Surgical Out-Patient Clinic facilities rose better than one hundred per cent, from 481 to 1,010. This is explained by a change in procedure which saw individuals above a certain income level referred to private doctors in the Hospital rather than to clinic doctors.

The trend that all these figures, and those that have preceded them in earlier annual reports, indicate is a change in the public's conception of, and demand from, an out-patient department. At one time, cases seen in the emergency clinic were truly emergency cases; those of a severe enough nature to warrant immediate attention. Today, however, the community appears to look upon Out-Patient as a dispensary-type facility, replacing the family doctor or the pediatrician.

As the patient traffic through Out-Patient increases, continual efforts are being made to streamline procedures to both increase staff efficiency and reduce waiting time for the patient. Numerous proposed changes in methods are being evaluated, as is the possibility of completely redesigning the physical area, including the Admitting Office section.

Miss Dorothy Pratt, R.N.  
*Administrative Assistant  
in Charge of Ambulatory  
Services*



## COORDINATOR, DEPARTMENT OF PATIENT EDUCATION AND RECREATION

### REPORT OF COORDINATOR, DEPARTMENT OF PATIENT EDUCATION AND RECREATION

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In March, 1961, a new department head was appointed to the Department of Patient Education and Recreation. For the first time the Coordinator was not directly involved in patient care and therefore was free to assess and administer the program. Time was taken to view the picture of total patient care and, with the administrative guidance of Dr. Lendon Snedeker, to consider the Recreation Department's role in the existing framework at The Children's Hospital Medical Center.

It first became evident that deployment and number of staff were not practical for accomplishing a responsible job. With the reassignment of Recreation personnel on hand and the addition of new members, a reasonable plan of operation suggested itself. In addition to the Director, the reallocated staff numbered six Recreation Coordinators, qualified with college degrees and a minimum of two years experience or study in related fields. These coordinators were assigned one to each of the floors of the Hospital and one to the House of the Good Samaritan.

Although this was a good beginning, the manpower shortage still presented a real dilemma to the staff if we were to give adequate attention to patients with immediate problems of adjustment. As there was no possibility of additional funds for salaried personnel, we had to look elsewhere for trainable, dependable help.

A major part of the Recreation program is directed towards bringing comfort to children early in their stay when anxiety, loneliness, and tension are uppermost. Each Recreation area includes from thirty-five to fifty-five patients of a wide age range and a constantly changing population, so that many helping hands are needed. We

increased the number of volunteer personnel working within the Recreation Department, planning for intensive orientation and close supervision, so that common goals might be recognized and fostered by all personnel within the program. Adding up the total needs per five day week showed that from two to three assistants in each area daily, both morning and afternoon, a total of one hundred people, would provide a minimum staff. In addition to the volunteers, student nurses and student teachers assigned to the Recreation Department for training would also assist.

Where previously a single person had supervised all recreation volunteers in the Hospital, now after a central orientation, each volunteer was assigned permanently to a Recreation Coordinator in one area for training and work assignment. The Director of Volunteer Service and the Coordinator of the Department of Patient Education and Recreation assume dual responsibility for the recreation volunteers. Early screening, general orientation to the Hospital, hours of service, department smocks, and related problems are the responsibility of the Volunteer Service. Final screening for the Recreation program, suitability of assignment, performance, orientation, and dependability in working with patients, come under the supervision of the Recreation staff. Skillful, consistent supervision of the volunteers seems to be the key to their successful performance within our Hospital Recreation program. Adequate professional staff has made this program development possible.

The Recreation Office now houses a giant chart of the six Recreation Areas, indicating the number of assistants needed per area. Not all those who apply to help in the program are

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

equally available for assignment. The majority come regularly one half day per week, many others come one full day, and student teachers and student nurses may work anywhere from one half day to four full days depending on their class in college and their course requirements. Three times yearly the Coordinator and an assistant undertake organization of a master chart which is the control to ensure smooth functioning of the Recreation program for two semesters and the summer period. It works, and with only a few low periods there are the needed hands, properly oriented, to keep the program functioning. Summary figures of work hours for one year show quite clearly the extent of help given by these assistants:

Student nurses	2,200 hours
Student teachers	2,800 hours
Daytime volunteers	8,500 hours
Total	13,500 hours

ASTOUNDING as this total may seem, when placed beside a patient census averaging two hundred and seventy-five children (out of a possible total of three hundred), two-thirds confined to their beds, it is immediately clear that every available hour of help is needed toward the realization of a thoroughgoing Recreation program for all patients. In time we hope to build a steadier corps of people giving complete coverage to every Recreation Area, year round.

The breadth of both age range and personality of the patients poses a real problem of staff education and training. To this end, the Department of Psychiatry assists in training the Recreation staff. One of its members meets weekly with the Recreation staff for continuing education and patient evaluation; during 1962, this was Dr. Chester d'Autremont.

Eight meetings of varied programs were held for the teachers of the

Boston School Department who work within the Hospital to further the integration of formal education with the Hospital program. Four of these were with the Recreation staff concerning joint problems such as referral of patients for schooling, prevention of conflicts in scheduling, and purchase of new equipment and books to enrich the educational library. At four additional meetings with Dr. d'Autremont, study was made of the meaning of education to the hospitalized child, varied medical problems, and the special relation developing between teacher and patient in the Hospital setting. Combined funds of The Children's Hospital and the Massachusetts Audubon Society have underwritten a nature study program, a valuable adjunct to the formal tutoring program.

The Women's Committee of the Hospital gives valuable assistance to many aspects of the Recreation program. Committee functions such as the Christmas window painting group, the Girl Scouts' Committee, the Holiday Committee, the Library Committee, the Gift Shop, the Christmas Card Committee, the Coffee Shop, and the Hospitality Coffees are a valuable contribution to staff, patient, and parent well-being. Generous funds contributed by the Women's Committee to the Recreation program provide for the salary of one Recreation staff member and for essential equipment that would otherwise be unavailable. Children's Hospital in general is indebted to the Women's Committee for its continuous support and interest in all aspects of the Recreation program.

The Red Cross Arts and Skills Program continues to be an important activity for the children. Through the generous work of Miss Amelie Peabody, trained workers in ceramics and textile painting come to the Hospital each week. The long-term children

especially look forward to their friendly visits and the rewarding experience of working with skilled craftsmen. We hope to re-introduce weaving as an absorbing handicraft for older patients who may need long-term projects.

Through the efforts of Mr. Edwin Bigelow of the State Street Bank and Trust Company and Mr. Lester Belcher, the Boy Scout activities of Troop #32 have been revitalized. An organized group of young Scout leaders has given of its time weekly, bringing to hospitalized Scouts continuity in their work and introducing Scouting to many patients who can continue this worthwhile activity when they return home. For children faced with long-term hospitalization, weekly activities have the invaluable quality of speeding the days along, and being a healthy antidote for depression and loneliness. Through the cooperative efforts of the Recreation staff and Scouting volunteers, a successful Scouting program was maintained continuously all year. We appreciate this valuable contribution to the patient recreation program.

The Children's Hospital is fortunate in having two large areas for patient entertainments. The Jimmy Fund Building houses an excellent auditorium for indoor activities, made possible for C. H. M. C. patient functions through the kindness of Dr. Sidney Farber. Through the generosity of Mrs. Oliver Higgins Prouty, the Prouty Garden offers a beautiful setting for outdoor functions during the warm months.

The familiar "Magic Show," made possible by Dr. Franc Ingraham and his friends; the Patient Art show; and a presentation by "The Magic Lantern Players" have become yearly functions that everyone enjoys. Additional activities have included Bozo the Clown, special acts from the Shriner Circus, a play in the round by the Weston

## COORDINATOR, DEPARTMENT OF PATIENT EDUCATION AND RECREATION

Players, the Traveling Zoo, and the Royal Canadian Band.

We have a great indebtedness to the many considerate people who remember the children with donations to the Hospital Recreation program. Our program has expanded in many interesting directions through their generosity. Unusual play equipment for the yard of the House of the Good Samaritan; weekly instruction in natural science; a growing record library; and a continuous supply of felt, wool, and toys of every kind are only a few of the welcome gifts we have received.

The Department program has expanded to include two out-patient areas for study and limited activity. Volunteers under the supervision of a Recreation Coordinator have observed and provided activities for children and parents during long, busy clinic waiting periods. We are continuing the program in the summer with an emphasis on using simple recreational materials found in the home. In this way, parents may observe their children happily and constructively at play with familiar, easily obtainable materials. The idea of using this as a teaching demonstration area for parent education may prove worthwhile.

As we look to the future, our main concern remains unchanged from what it was in 1961. We would like to orient all Hospital personnel involved in patient care to the great potential which lies in a vital recreation program, incorporated in the best total patient care program.

Mrs. Barbara Patterson  
*Coordinator, Department of  
Patient Education and  
Recreation*



## REPORTS OF ADMINISTRATIVE DEPARTMENTS

**REPORT OF  
CHIEF PHARMACIST**

The Pharmacy, located in its new quarters for the past two years, has continued to grow as expected, and although most of its stock is efficiently stored in this area, it is crowded and not adequate for the future. More space, centrally located, to better service the patients and the Hospital is a must in the near future if the Pharmacy is to be used to advantage.

The volume of drugs dispensed by the Pharmacy this past year was approximately \$250,000 and is lower than expected due to a substantial price reduction in antibiotics and a decrease in use of chloramphenicol which had accounted for a high percentage of antibiotic purchases in the past.

Approximately 20,000 prescriptions, not counting those under the Chronic Disease Program, were dispensed to out-patients last year. This is a time-consuming operation because of the individual nature of the prescriptions, but patients experienced very few delays in obtaining their drugs.

The Commonwealth of Massachusetts, under the Chronic Disease Program of the Crippled Children's Services, purchased a great many medications which were received, stored, and dispensed by the Pharmacy. There are 375 cystic fibrosis patients serviced under this program presently, and approximately 1500 forms requesting an average of six medications for two to three months' treatment were processed last year. Two thousand prescriptions were dispensed to seizure patients last year under this same program. The Children's Hospital Pharmacy is probably the only pharmacy that dispenses drugs in shopping bags.

The Pharmacy receives no direct monetary credit from dispensing these Chronic Disease prescriptions, as the medications are purchased directly by the state, although much additional

work results. Records of the drugs received, on hand, and dispensed must be kept and two detailed reports were prepared monthly for the Crippled Children's Services and the Hospital Administration. A fee for each patient visit is received by the Hospital or the Seizure Unit but does not appear as a Pharmacy credit.

While much time and effort was necessary to dispense out-patient prescriptions, the Pharmacy did not neglect the routine and special services for in-patients. Sterile vials of narcotics, phenobarbital, and versenate were supplied to the divisions in convenient pediatric doses which are unavailable commercially. Penicillin and streptomycin, properly labeled with strength and expiration date, were delivered to the divisions three times weekly as usual. Erythromycin and chloramphenicol, reconstituted and ready to use, were available as planned for this year. Routine stock drugs and many individual medications were delivered daily to each division upon receipt of requisition. Empty containers and any returns for the Pharmacy were picked up on this same trip.

The many research departments and laboratories of the Hospital obtained their alcohol, drugs, and some chemicals from the Pharmacy, which was always glad to aid a doctor or laboratory in locating and obtaining any hard-to-get drug or chemical and to prepare it in a convenient dosage form, if desired.

A pilot study in conjunction with Abbott Laboratories, under the supervision of the Intravenous Solutions Committee, was run this year to evaluate a convenient, disposable, plastic, intravenous burette-type set. This study included the stocking, charging, and accounting for solutions, as well as sets. This information should prove valuable when the Hospital purchases commercial intravenous solutions.

This year the Pharmacy Committee of the Hospital Purchasing Corporation negotiated several contracts enabling the Pharmacy to purchase Phisohex, heparin, chemicals, and tetracycline products at considerable savings without any sacrifice of quality. More drugs may be available under similar contracts this year and may keep Hospital Pharmacy costs from increasing.

It is very probable that the Pharmacy will be asked to purchase, receive, and distribute such solutions and sets in the Hospital this year. This job will require added space for storage and will increase the clerical work of the Pharmacy considerably. The addition of a secretary to the staff of the Pharmacy would allow the pharmacists to concentrate on dispensing drugs, and not on assembling reports for accounting or filing requisitions.

Arthur M. Thompson  
*Chief Pharmacist*

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

# REPORT OF DIRECTOR, PHYSICAL THERAPY DEPARTMENT

## Statistics

The Physical Therapy Department is pleased to report a ten per cent increase in services rendered during the past year, exactly offsetting a ten per cent decrease in 1961. This covers all physical therapy activities within the Medical Center, including the special polio and cerebral palsy clinics.

Analysis of the distribution among in-patient and clinic and private out-patient services presents some interesting trends, illustrating aspects of changing character and pinpointing areas of present and potential development. Comparison with the annual report of two years ago illustrates some of these changes.

		<i>Clinic</i>	<i>Private</i>
	<i>In-</i>	<i>Out-</i>	<i>Out-</i>
	<i>Total</i>	<i>Patient</i>	<i>Patient</i>
1960	28,928	63%	31% 6%
1962	28,988	65%	26% 9%

Physical Therapy has for many years been identified in this Hospital primarily with the care of polio cases. However, in spite of the radical decline of incidence in this disease, our treatment totals in all areas have begun to increase.

	<i>Total</i>	<i>Polio</i>	<i>%</i>
1960	28,928	15,138	52
1962	28,988	7,568	26

The bulk of our work continues to be with orthopedic patients but has become more diversified, as illustrated by a drop from 52 per cent to 26 per cent in polio treatments without an equivalent drop in total treatments. Of further significance is the ratio of in-patients to out-patients. Limitations of space and personnel, which confine our Out-Patient Clinic to the mornings, are largely responsible for this. In a hospital of this size probably the reverse proportion should be true and, with the proposed remodeling of the Department, appreciable expansion of our out-patient activity can be anticipated.

This has been a period of exploration and development of new programs which the annual burden of polio cases had hitherto limited or prevented. Chief among these are the use of physical therapy in the treatment of cystic fibrosis and in the post-operative care of cardiac surgery patients. In 1960, cardiac surgery treatments accounted for 0.54 per cent of the total treatments, whereas in 1962 this has increased to 4.10 per cent. Substantial increase in activity in the Surgical, Neurosurgical, and Tumor Therapy Divisions is noted and also in the Infants' Hospital and Newborn Nursery. In the House of the Good Samaritan, the treatment load has almost quadrupled in the past two years and now represents 14 per cent of our work.

## Staff

Difficulty in obtaining staff replacements continues to plague us. With a normal complement of nineteen, we anticipate a 25 per cent annual turnover. This could be managed without serious interference with patient care except for the usual long interval (four to six months) between resignation and replacement. The outstanding reputation of the Medical Center is a considerable asset, but we are competing on a national level where the shortage of trained personnel is acute. The major problem is a salary scale in this area fifteen to thirty per cent below the national average. In spite of this, only one of the eight persons who have resigned did so to accept employment elsewhere. The other seven were involuntary resignations due to marriage, moving away, etc.

## Education

Education given and received continues to be an integral part of our activities. In addition to post-graduate training for foreign physical therapists, our semi-annual courses on physi-



## DIRECTOR, PHYSICAL THERAPY DEPARTMENT

cal therapy in cystic fibrosis continue to be oversubscribed. The National Cystic Fibrosis Research Foundation offers grants to the research and teaching centers throughout the country for the purpose of sending physical therapists here for training.

Major teaching responsibilities remain in the undergraduate program at Simmons College, with which the Medical Center is affiliated. Since the beginning of this affiliation we have provided the major portion of the instruction for 170 graduates, and currently have 24 students enrolled in two classes.

With the diversification of our patient load has come an increase in our teaching activities within the Nursing Service, Nursing School, and affiliating groups. This has approximately doubled over the past two years.

One of the stimulating aspects of our work is the opportunity of exchanging ideas with physical therapists from other countries and it is regrettable that we are able to accept so few of the many who wish to come here. Since differences in methods necessitate long periods of indoctrination before these foreign-trained physical therapists can participate in patient care, we can accept exchange visitors for no less than a one-year period. Post-graduate students are accepted for shorter periods on a tuition basis, and visitors are welcome for a day or two. During the past two years we have had graduate students and visitors from Australia, South Africa, Germany, Lebanon, Argentina, and several from England and Denmark.

We enjoy the privilege of attending and participating in rounds and other teaching activities within the Medical Center. In addition to these many intramural educational opportunities, grants from outside agencies have permitted staff members to at-

tend six post-graduate courses and educational institutes.

#### Honors

Mrs. Elizabeth Zausmer presented a paper on physical therapy in cystic fibrosis at the annual conference of the American Physical Therapy Association in Chicago. With Dr. Kulczycki she also participated in a three-day seminar on the same subject held at the University of North Carolina for doctors and physical therapists throughout the state.

Miss Claire McCarthy has served with distinction as Chairman of the Committee on Education of the Massachusetts Chapter of the American Physical Therapy Association for the past two years, and several other staff members have served on various local and national committees.

The Department has prepared three scientific sessions for the Massachusetts Chapter of the American Physical Therapy Association with full staff participating in planning and individual members presenting the program. These were Common Disabilities of the Hip in Children; Muscle Testing of the Shoulder Girdle; and Physical Therapy Following Three Orthopedic Surgical Procedures, (a) Adductor Myotomy and Heel Cord Lengthening, (b) Correction of Sprengel's Deformity, and (c) Iliopsoas Transplants. All of these are common procedures in Children's Hospital but relatively little known in other areas.

Miss Florence Lane has assisted in the annual two-week Institute on Cerebral Palsy offered at Boston University in cooperation with The Children's Hospital Medical Center.

I was a speaker at the Conference on Clinical Education for Physical Therapists.

Several staff members have been guest lecturers at Boston University,

Sargent College, and at the Bouve-Boston School of Tufts University.

Through the Embassy of the United Arab Republic, arrangements were made for Miss Claire McCarthy to spend four weeks in Cairo for the purpose of teaching a local physical therapist the appropriate physical therapy treatment for Mohamed Salem who had spent several months at Children's Hospital. "Mickey," a private patient of Dr. William T. Green, is the son of the late Salah Salem, a former minister in the Government of President Nasser.

And finally, in a lighter vein, we should not overlook the activities of our members within the Hospital, in the bowling league, on committees for the annual picnic, and the yeoman service of Joy Smith as Chairman of the annual Christmas party.

Miss Shirley Cogland  
*Director,  
Physical Therapy Department*

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

October 1961 to September 1962

	Individuals	Treatments
<b>Polio Patients in the Hospital</b>		
Division 37—Medical	2	31
Division 26—Orthopedic	94	950
Division 36—Orthopedic	53	1,249
Division 71	13	1,490
Division 72	2	120
Division 74	1	2
Division 28—Tumor Therapy	1	1
Division 25—Private	1	4
Division 34—Surgical	1	2
	<u>168</u>	<u>3,849</u>
<b>SERVICES (excluding polio)</b>		
Division 37—Medical	75	1,112
Division 26—Orthopedic	322	3,496
Division 36—Orthopedic	207	2,746
Division 71	12	2,376
Division 72	23	1,163
Division 73	2	431
Division 74	4	119
Division 25—Private	26	230
Division 27—Infants' Hospital	37	504
Division 29—Newborn Nursery	3	115
Division 35—Cardiac	178	1,319
Division 28—Tumor Therapy	30	481
Division 39—Neurological	12	57
Division 33—Neurosurgical	38	701
Division 24—Surgical	12	145
Division 34—Surgical	23	319
Division 38—Metabolic Unit	1	3
Division 14—ENT	1	9
	<u>1,006</u>	<u>15,326</u>
<b>HOSPITAL PERSONNEL</b>		
	34	315
<b>BADER BUILDING OUT-PATIENT</b>		
General Clinic	731	1,998
Privates—Polio	88	458
General	605	2,073
	<u>693</u>	<u>2,531</u>
Cerebral Palsy Clinic	268	1,040
Cerebral Palsy Nursery School	—	668
MIPC	—	2,209
MIPC Outside Clinics	—	1,052
	<u>1,692</u>	<u>9,498</u>
<b>Total</b>	<u>2,900</u>	<u>28,988</u>

### REPORT OF DIRECTOR, SOCIAL SERVICE

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As the Social Service Department enters its third year of transitional leadership the intent of this report is to accent the good fortune of the Hospital and of the Acting Director to have enjoyed the loyalty and devotion of such strong and conscientious staff. Even during the past year, a purposeful and consistent program has been maintained and furthered in spite of my total absence of four months due to illness and leave of absence. Special thanks in this regard are extended to Miss Ethel Walsh, Chief Social Worker in the Psychiatry Clinic, Mrs. Janice Van Riper, Cerebral Palsy Clinic, and Miss Molly Cokin, Medical Out-Patient Department, for their great generosity and competence. In actuality and by plan, the department has been carried on under this "four-power conference" for approximately two years. Miss Walsh has now accepted an associate professorship at the Simmons College School of Social Work, and Mrs. Frances Lewis, a staff member since January, 1960, will assume the position of Chief Social Worker in Psychiatry for the coming year. Mrs. Van Riper will be resigning early in 1963 for personal reasons. It will be impossible to replace her, but we are attempting to recruit an experienced substitute to join the ranks.

If our own department has been characterized by shifting responsibilities, corresponding fluctuations within the Hospital have given rise to an uncommon amount of work in the form of self-examination, analysis, and interpretation of staff function. In July 1961, Miss Walsh, Mrs. Lewis, and I completed a report of departmental structure and function to serve as a guide for the Ad Hoc Advisory Committee appointed by Mr. Greer to determine future goals and to select a permanent director. This report of ours is available, and is still authentic as a

reference for current practice. Explorations through the Personnel Department to "describe jobs," and conversations with various hospital consultants, while they have added heavily to the load, have provided us with useful results in evaluating assets and liabilities and laying the ground for future planning.

#### Staff

A full staff would consist of thirty-three to thirty-seven professionally trained social workers (twenty-five full-time and nine part-time) and four case aides. There are four vacancies: Permanent Director; Supervisor in the Orthopedic area; one part-time worker in the Medical Out-Patient Department to replace Mrs. Jane Sease; and another part-time opening in the Cerebral Palsy Clinic held until last month by Mrs. Ann Roelofs, both excellent members who resigned to add to families. We have ten junior workers with less than three years post-graduate experience, five casework supervisors carrying in-service administrative functions, with nineteen covering a wide range of experience and services in between. We have had a relatively small turnover during the year. In addition to the changes mentioned, and some shifts among case aides, Mrs. Phyllis Haberstroh, Psychiatry Clinic, has moved with her husband to Denver, Colorado; Mrs. Suzanne Dubroff, also in Psychiatry, is working at Judge Baker Guidance Center; and Mrs. Barbara Schwartz, a part-time worker in Medical Out-Patient, left in the spring to accept a position at the McLean Hospital.

Five new positions have been added over the past few months. Miss Mary Gavin is attempting to cover the whole of Surgical and Neurosurgical Services. Miss Ruth Shure, recently associated with the Home Care Pro-



## REPORTS OF ADMINISTRATIVE DEPARTMENTS

gram at Massachusetts Memorial Hospitals, has been added to the staff of the Nutrition Clinic. Miss Deborah Alden comes from the Simmons College School of Social Work to assist Miss Laird in the Seizure Clinic. Mrs. Mary Fogel of the Psychiatry Clinic has joined Dr. William Crowell, Psychiatrist, in offering part-time team consultation to patients of the Adolescent Unit. Miss Betsy Newman, Case Aide, has transferred from the Orthopedic Clinic to work under Miss Antoinette Pieroni in Tumor Therapy. **Services**

Since our Committee Report of July, 1961, describes in detail the nature and scope of patient, Hospital, and community services, we will not attempt to do so in this report. There has been a significant increase in numbers

of cases this year, even antedating staff additions. The following statistics are from September 1961 to September 1962.

Pertinent observations emerge from these figures. We will allude to a few.

A high degree of energy and skill is required of the social worker in defining limits and determining the selection of cases on Services where the medical diagnoses themselves regularly manifest concomitant psychological and socio-economic problems. This fact is quickly reflected by the numbers of referrals of retarded children, children with heart disease, epilepsy, and orthopedic disabilities. These diagnostic groups involve a singular kind of discrimination on the part of the social worker, especially when there may only

be one appointed to a given diagnosis. Certainly Mrs. Burwash, Mrs. Miles, Mrs. Snedeker, and Miss Laird deserve honorable mention for their experienced and untiring contributions to these strenuous assignments.

As counterbalance, we see certain strategic areas with fuller coverage, more controllable screening of cases, and in some instances slower tempo, when profoundly disturbed social situations can be assured of greater availability of intensive, sustained treatment. Although this is possible to some extent throughout, a few locations are conspicuous, such as Psychiatry Clinic, Medical In- and Out-Patient, Tumor Therapy, Neurology, and other settings where staff is adequate to allow for it.

The number of Social Service cases in the Surgical Department is consistently increasing, for reasons well-documented in Miss Gavin's report of her first year there.

Throughout the Hospital, there are serious gaps in coverage. Notable among these are in the Endocrine, Diabetic, Nephrosis, and Allergy Clinics. Neurosurgery is another growing source of referral of grave social problems. Mrs. Burwash (Retardation) was obliged to withdraw from helping on this Service last July, and Miss Gavin will soon be unable to cope with these long and complicated cases.

### Teaching

Our five supervisory positions involve specific teaching responsibilities. This group performs, directly and indirectly, the overall function of in-service education. Ten junior members receive weekly individual supervision; ten more experienced workers have the benefit of scheduled case consultation and guidance in professional development; and seven function independently, administratively responsible to the Director, but neither supervised

Service	Comprehensive Cases*		Limited Service*	
	1960-1961	1961-1962	1960-1961	1961-1962
Medical Out-Patient	299	299	116	168
Diabetic	4			
Medical House	120	113	54	121
Retardation	219	234	324	333
Cardiology	56	62	347	340
House of Good Samaritan	50	55	271	420
Adolescent	18	22		
Family and Child Health	46	58	232	87
Tumor Therapy	81	70	61	75
Psychiatry	174	201		
Neurology	151	135	28	45
Seizure	119	144	288	435
Cerebral Palsy	80	92	130	247
Orthopedic	120	172	495	571
Mass. Inf. Paralysis Clinic	116	81	205	167
Mary McArthur Respirator Unit	10	4	27	
Surgical	94	169	15	46
Sarah Fuller Foundation	53	41	19	33
TOTALS . . .	1,810	1,972	2,612	3,088

\**Comprehensive Cases* signify those families for whom continuing casework responsibility is assumed.

\**Limited Service Cases* are those consisting only of social review and/or assistance with a particular concrete need.

by nor supervising other staff members.

Monthly department meetings last year held to the theme of social research, with visitors lecturing on special study projects underway in the vicinity. Dr. Tully Benaron, Psychiatry Department, continued to conduct a bi-weekly seminar on case presentations for those working in medical services. A ten-hour orientation course was offered to students and new staff of the Hospital and Children's Mission to Children.

Students of schools of social work and college "careers" students are accepted for field placements under qualified staff members. Pressures of work and space unfortunately restrict the extent of this program, though this year we do have five graduate students from the Simmons College School of Social Work and Boston University.

As to inter-professional intramural education — the sharing of knowledge with medical personnel, Psychiatry, Nursing, Physical Therapy, teachers and recreation workers — we have a few activities on all fronts. We cannot be grateful enough for the wealth of learning made available to us through all these fields, and there is little doubt that the freedom of access to such valuable opportunities has much to do with maintaining stability of staff. Our own teaching of others, except through case demonstration, has a long way to go, especially with medical personnel itself. Miss Dorothea Chickering, Educational Casework Consultant with the Family Care Program, a Harvard Medical School appointment, is the only one of our staff in a formal teaching relationship with medical student curriculum. Indeed, even for the House Officers, the only device of academic import arises in the ward meetings on the Medical and Orthopedic Divisions, and clinical conferences in the Medical Out-Patient

Department. While most of these sessions are service-oriented, they vary according to leadership and to the acumen of participants, and frequently discussions of individual patient management are consciously utilized to illustrate principles of comprehensive care.

#### **Research**

Three staff members have participated in research projects during this year. Mrs. Anita Dankner and two case aides continue to review and sustain follow-up of those families under the Maternal and Infant Health Study. Mrs. Anne Roelofs shared in the Child Accident Study directed by Dr. Roger Meyer of the Child Health Division. Miss Molly Cokin and a case aide participated in planning and implementing a pilot study to evaluate the reasons for parents' failure to keep appointments in the Medical Out-Patient Clinic.

We have no identifiable research in operation under our own auspices. One can say, however, that our two most active committees, one an Education Committee, and the other on Personnel Practices, have succeeded in sharpening research interest and in stimulating exploration of many avenues of practice. Although these committees are not of "design research," they show a trend towards more disciplined study, a stepping-stone perhaps towards formal research, but a very real one nonetheless.

In closing, we should like to express our appreciation to those in administrative relationship to our department who have given the personal warmth and support to carry us through the past year.

Miss Elizabeth Maginnis  
*Acting Director, Social Service*

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

### REPORT OF MANAGER, SURGICAL APPLIANCE SHOP

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The past year was indeed a busy one. The volume of work received was fifteen per cent greater than the previous year's and thirty per cent greater than two years ago. There were 6,707 orders completed within the year, ranging from minor repairs to elaborate braces. The department has not increased its staff during the past two years; however, it was necessary, during the summer vacation period of 1962, to work overtime in order to speed up the delivery of braces. The vacation months always present a problem, since the department is constantly short-handed during this period and the number of orders reaches its highest yearly peak and pressures for quick deliveries increase due to plans for camp, etc.

During the year, a cost analysis of sixty of the appliances which are made in the department was completed. Such an analysis had not been done since 1959. A new price list was established to bring charges more in line with operational expenses. The revised charges became effective September 1, 1962. A review of other appliances as well as repair work will be made during the coming year. The benefits of the new price list will not be reflected in this year's activities, because its effective date was so near to the end of the fiscal year. However, the coming year should narrow the gap between income and operational costs considerably.

Professor Robert W. Mann of the faculty of the Massachusetts Institute of Technology visited the department with several of his Engineering students. Professor Mann has first-hand knowledge of bracing problems, as he has participated in brace research with a Massachusetts General Hospital group. He also served on an advisory committee to the American Orthotics and Prosthetics Association which did a survey of orthotics in the United

States for the United States Government's Office of Vocational Rehabilitation. One of the students, Mr. William Pettus, chose to do a thesis on the possibility of designing a mechanical pelvis, which would be the basic component for a whole new concept of bracing.

The Surgical Appliance Shop participated in the national orthotics survey mentioned above as one of the facilities canvassed. I served on the survey's Content Committee.

With an eye to the future, the department enrolled its first trainee in a formal four year training course. This individual will be exposed to all aspects of bracemaking during his training.

John Glancy

*Manager, Surgical Appliance Shop*



## DIRECTOR, VISUAL EDUCATION DEPARTMENT

# REPORT OF DIRECTOR, VISUAL EDUCATION DEPARTMENT

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This Department continues to be very busy, as is clearly shown in the Statistical Reports below. The following is a selected summary of our work.

Several exhibits were produced during the past two years for the Orthopedic Department and other Services. The largest of these, both in physical size and quantity of prints, was made for Dr. Clement A. Smith.

A number of teaching motion pictures have been made for Dr. Henry H. Banks, Dr. William T. Green, and the Surgical Research Laboratory. Magnetic sound was recorded on film for Dr. Richmond S. Paine, Dr. Arthur W. Trott, and the Surgical Research Laboratory.

Late in 1961 experimental work was started on recording fluorescent phenomena at high speed under ultra-violet light. The experiments are continuing on a successful basis. Further work on improved equipment is being carried out to cover larger areas of fluorescence than is possible with present equipment. Our exposures are at 1/500 second, covering, at present, an area of about four square feet. We hope to be able to include, eventually, an area of sixteen square feet. This work has been carried on without cost to the Hospital.

Research was completed and a successful motion picture made for the Department of Radiology. This film makes it possible to show x-ray motion pictures made at a low film speed, of catheterization of the heart, etc., without the need of a special motion picture projector. This seems to solve the problem of carrying a special type of heavy motion picture projector to meetings outside the Hospital. This may well become a routine procedure.

One paper was published during the period covered by this report: "Lights and Lighting," F. R. Harding, FBPA:JBPA, Volume 28, #3. Another paper, "High Speed Color Photog-

raphy of Fluorescence by UV Light," was read at a meeting of the Boston Chapter, Biological Photographic Association.

Our deep appreciation to Mrs. June Armstrong and Miss Pauline McRae for their cooperation and constant efforts to improve our biophotographs, and for their cheerfulness, under sometimes difficult circumstances.

F. R. Harding, *Director*  
*Visual Education Department*

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

DEPARTMENT OF VISUAL EDUCATION  
STATISTICAL REPORT 1961

<i>Service</i>	<i>Cases</i>	<i>Photos</i>
Orthopedic	500	2014
Surgical	270	662
Medical	780	1631
Neurosurgical	87	264
Infants' Hospital	48	114
Pathology	496	1017
Tumor Therapy—		
Clinic & Division	313	901
Massachusetts		
Infantile Paralysis		
Commission	97	413
Private Office	270	728
Private Division	381	1186
Adolescent Clinic	4	5
Cerebral Palsy		
Clinic	10	86
Newborn Nursery	7	13
House of the Good		
Samaritan	6	11
X-ray Therapy	8	21
Neurological	16	42
Dental Clinic	4	13
Child Health	2	3
Otolaryngology	1	2
Total	3300	9126
Misc. Negatives		2579
Misc. Prints		7667
Standard Lantern		
Slides B&W		1698
35MM. Lantern		
Slides B&W		1771
Standard Lantern		
Slides Color		217
35MM. Lantern		
Slides Color		457
Motion Pictures		277
Motion Picture Footage	11,275	
Total Negatives,		
all purposes		12,488
Total Prints,		
all purposes		16,792
Total Charges		\$17,679.51

DEPARTMENT VISUAL EDUCATION  
STATISTICAL REPORT 1962

<i>Service</i>	<i>Cases</i>	<i>Photos</i>
Orthopedic	474	1802
Surgical	221	461
Medical	721	1577
Neurosurgical	150	348
Infants' Hospital	79	173
Pathology	463	987
Tumor Therapy		
Clinic & Division	364	1057
Massachusetts		
Infantile Paralysis		
Commission	49	196
Private Division	305	980
Private Office	220	581
Cerebral Palsy Clinic	25	190
Growth Study	14	28
Neurology	6	18
Adolescent Clinic	7	15
Newborn Nursery	7	18
Child Health Clinic	3	6
X-ray Therapy	2	4
Dental Clinic	3	14
Total	3113	8455
Misc. Negatives		2680
Misc. Prints		6404
Standard Lantern		
Slides B&W		1602
35MM. Lantern		
Slides B&W		1661
Standard Lantern		
Slides Color		240
35MM. Lantern		
Slides Color		607
Motion Pictures		300
Motion Picture Footage	13,390	
Total Negatives,		
all purposes		11,325
Total Prints,		
all purposes		14,949
Total Charges		\$17,017.57

## DIRECTOR OF FISCAL AFFAIRS AND CONTROLLER

# REPORT OF DIRECTOR OF FISCAL AFFAIRS AND CONTROLLER

This report describes the comprehensive program undertaken by the Controller since coming to this Institution in September 1960. We believe that a description of the accomplishments under this program, plus a preview of future plans, will adequately cover the activities administered by the Controller.

These functions cover:

- Accounting
  - General
  - Cost
  - Patient billing
  - Collection of accounts
- Purchasing and Disbursements
- Systems and Procedures
  - Methods improvement
  - Work simplification
  - Forms design and control
- Data Processing
- Special (ancillary) services
  - rate structure
- Financial and statistical reports

In 1961, in view of the mounting deficit and recognizing that the current financial information was inadequate both for evaluation of current operations and future decision making, we prepared and submitted to the Executive Committee of the Board of

Trustees, Administration, and Chiefs of Staff, a divisional income statement and report using cost allocation techniques. This report showed the magnitude of the total loss and the relative losses by revenue centers: in-patient areas, forty-six per cent; out-patient areas, thirty-four per cent; research areas, twenty per cent. Based on this analysis, we made specific recommendations to reduce the operating losses in each area.

## Accounting Department

In 1962, we implemented these recommendations in the major revenue areas by revising the patient rate charge structure. The effect upon annual income, based on 1962 occupancy and utilization of Hospital services, is estimated below.

Implementation of our recommendations in other areas was deferred in 1962 because of the priority assigned to increasing revenue in the major areas listed. A description of these other recommendations will be included at the end of this report in the paragraphs devoted to our future plans.

During these two years, many

<i>New Charges Established</i>	<i>Increased Annualized Billings</i>
Central sterile supplies used for patient care on the nursing divisions and in the out-patient clinics	\$ 13,000
Recovery service following anesthesia	59,000
<i>Current Charges Updated</i>	
Anesthesia service	37,000
Appliances—surgical and orthopedic	15,000
Blood Bank services	12,000
Electroencephalography	20,000
Operating room	140,000
Day rates (approved by the Executive Committee of the Board of Trustees)	
(Includes \$20,000 realized by elimination of \$1.00 per day discount)	195,000
Estimated annual effect of changes	<u>\$491,000</u>



## REPORTS OF ADMINISTRATIVE DEPARTMENTS

changes and improvements have been effected in the various sections of the Controller's Department. Some involved extensive systems and procedural changes; others involved less in the way of systems work and substantially more in day by day follow-up of routine functions. An example of the latter is the improvement in the collection of patient receivables. It is worth stating here, in order to understand patient billing and collection, that fifty per cent of our patients have Blue Cross insurance, twenty per cent have other insurance coverage, and fifteen per cent are subsidized by welfare agencies. Most of the remaining fifteen per cent are medically indigent and require substantial or total free care charitable allowances.

One reason for the reduction of patient receivables, as shown below, is the accelerated processing of Blue Cross and other insurance claim forms. Two years ago, many insurance claims were not filed until six months after the patients' discharge. Contributing to this delay was the fact that separate claims had to be filed by the Children's and Infants' Hospitals, House of the Good Samaritan, and the Respirator Unit because of individual contracts between each institution and Blue Cross. In October 1961, we were successful in negotiating one consolidated contract with Blue Cross. This major step, plus improvement in our internal claim processing procedures, makes it possible for us to file currently all claims for Hospital reimbursement.

The other factor resulting in the reduction of patient receivables has been increased attention to our current outstanding accounts. In addition, we have reviewed the older accounts (dating back to 1958-1959-1960) and cleared up a substantial number of them through the issuance of charitable allowances, where indicated, as an inducement to settlement.

A few figures will illustrate the effect of the prompt insurance claim filing and our current collection activities:

In-patient receivables,	
September 30, 1961	\$1,615,000
In-patient receivables,	
September 30, 1962	<u>1,490,000</u>
Decrease in outstanding	
balances	\$ 125,000

However, the improvement in collections is significantly greater, because in-patient billings in 1962 of \$4,512,000 exceeded 1961 billings by \$542,000, thus increasing the cash flow \$667,000.

#### Purchasing

Other changes in the department required extensive systems and procedure review with implementation by written standard procedures such as the revised purchasing-disbursement procedures initiated this year. This involved the transfer of the invoice audit function to the Disbursement Accounting Office and the central stores inventory to tabulating equipment (12,000 purchase orders and 27,000 voucher invoices processed annually). The tabulated store inventory shows at a glance the reorder quantity point and the normal stock quantity for each item. The result has been to decrease paper handling in the Purchasing section, thereby making available more time for the buying function.

#### Methods and Forms Control

This section is responsible for a course in work simplification for employees, the coordination of systems and procedural studies, and for the design and control of all Hospital forms. During the past two years, the Forms Control Office has designed or revised many forms used throughout the Hospital, such as admission form, daily census

summary, purchase order, fund drive: combined gift list and deposit slip, preprinted charge requisitions, etc. These changes resulted from our Department activity and from regular form revisions as required by other departments. This has been a very effective program working toward uniformity throughout the Hospital in form design as well as reduction of paper work costs.

#### Data Processing

The increasing complexity of The Children's Hospital Medical Center has made it necessary to transfer additional functions to our data processing equipment. Some of the activities which have been tabulated during the past two years are:

A comprehensive space utilization survey by buildings and service functions for the management consultants in such a manner that the data are available for administrative control of physical facilities.

Departmental equipment asset purchases during the past two years and the related depreciation provisions recorded on punch cards. The resulting tabulation provides the analysis that is required by the Massachusetts Division of Costs and Finances during its annual audit to establish our welfare reimbursement.

Pharmacy Department inventory at the end of the 1962 fiscal year to expedite the annual closing and to prepare for the future transfer of all pharmacy transactions to tabulating.

The establishment in 1962 of charges for central supply services also required a systems and procedures review coordinated with certain Nursing Department functions. This was a successful collaboration and was the first step in a comprehensive data processing program using preprinted IBM card charge requisitions.

## DIRECTOR OF FISCAL AFFAIRS AND CONTROLLER

Our present procedures represent a basic utilization (2,000,000 cards processed annually) of our punched card equipment; e.g., general ledger, special fund ledger, voucher and payroll disbursement, revenue and expense distribution, charge card requisitions, etc. In 1963, we plan to further integrate revenue, expense, and statistical data with mechanized data processing procedures—including recommendations made in our earlier reports. The object of this comprehensive program is to mechanize certain functions, which at present require manual clerical time, by transferring them to our data processing equipment. The benefits derived should be the tabulation of more timely, accurate, and effective reports for decision making, and a reduction in direct and indirect clerical costs.

The comprehensive program covers:

#### *Patient Admitting Statistics*

Establish patient master record in the data processing files from source data obtained at admission: name, medical record number, geographical code, insurance code, doctor's code, admission diagnosis code, division and room number, etc. From this stored and updated information, reports may be tabulated, such as daily census by nursing division, showing patient, condition, admittance date, service, age; bed capacity and occupancy; monthly summary of patient statistics, etc.

#### *Ancillary Service Charging*

Establish (a) in the data processing file, a master price list and a numerical code for all special (ancillary) services and (b) uniform patient charge system. Because of inter-relationship, these combine to make a joint project. The present preprinted and prepunched IBM card requisitions should be standardized for uniform

use throughout the Hospital in both the in-patient nursing units and out-patient clinics. A copy of each service requisition will be sent to the Data Processing Office for pricing the service and billing the patient. The tabulated output will provide current and cumulative revenue data and, most importantly, timely statistical data for each service rendered by each ancillary department. The benefits of mechanization in these functions are obvious.

#### *Accounting and Cost Control*

We also plan to implement an important recommendation made in our earlier report. This recommendation is the assessment of all research grant activities for occupancy and administration overhead. Our present overhead is approximately twenty-five per cent of our total research grant expenditures. However, the present overhead reimbursement averages only six per cent. We plan to review each research area and recommend an equitable overhead rate to be assessed against the grant.

Because of the rising cost of providing out-patient services, including accounting and billing clerical operations (40,000 account cards require 160,000 annual postings), we believe that the out-patient and private ambulatory areas should operate on a cash basis. We plan a review of procedures to determine the feasibility of converting to a cash basis.

In addition to the monthly comparative financial statements, we shall issue in the new fiscal year, quarterly departmental cost reports which will provide department heads with current departmental ratio of operating expenses to revenue. The present high ratio of expenses to revenue (one hundred twenty per cent) emphasizes the need for constant departmental control, where possible, of costs and revenue.

Our goal during the past two years has been, and it will continue to be, the reduction of loss from operations. To this end, we will continue to direct our efforts toward:

1. The maintenance of a current, comprehensive, and realistic rate structure covering all services rendered to patients, other departments, and other institutions.
2. The implementation of this rate structure by effective data processing.
3. The increased utilization of data processing equipment to provide Administration, Chiefs of Service, and Department Heads with good managerial tools and to reduce clerical costs.

Richard E. Held, CPA  
*Director of Fiscal Affairs  
 and Controller*

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

### REPORT OF DIRECTOR OF GENERAL SERVICES

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The administrative departments grouped under the heading of general services include the Dietary Department, Plant Operations, Housekeeping, Linen Service, the Mail Room, the Print Shop, Special Services, Communications, and the Reception and Messenger Service. During 1962, a number of significant changes in the personnel and operation of these areas was accomplished.

#### Dietary Department

Mrs. Martha Stuart, Chief Dietician, retired in October 1962 after thirty-seven years of excellent service to the Hospital. The difficulty of replacing a Department Head who has served for such a long period cannot be overstated. However, the Hospital was fortunate in finding Miss Maxine Gilson, a graduate of San Jose Teachers College in California and of the Massachusetts General Hospital's course in Dietetics. Subsequent to the completion of her training at Massachusetts General Hospital, Miss Gilson joined the Dietary Staff there and in 1959 was appointed Assistant Director of the Dietary Department until she joined The Children's Hospital Medical Center as Director of the Dietary Department on September 10, 1962.

Miss Gilson manages a department of sixty people who must serve approximately 2,000 meals every day to patients and staff. It is significant to note that the number of meals served to staff and employees in the cafeteria is more than double the number of meals served to our patients.

This tremendous growth of staff and employee feeding has, during recent years, demanded much of the attention of management. It is now time to place considerable stress on improving the methods and technique of serving our patients. Miss Gilson is placing emphasis on this area which must, of course, have first priority.

During the summer and fall of 1962, major alterations and additions were made in the staff and employee dining area. The Trustee Building Committee authorized the addition of a new cafeteria serving line primarily for the use of the professional staff and an enlargement of the seating capacity. Also, at this time major changes were made in the existing dishwashing and set-up areas for the cafeteria lines. We have been fortunate in having a large and well-equipped main kitchen which was designed and built in 1954-56.

The feeding of the rapidly increasing number of children and their parents who are here as out-patients and must remain over a meal hour is a problem that the Hospital must soon meet. The Women's Committee Lunch Shop continues to make a major contribution in this area, but its location is away from the Out-Patient area. The vending machines, which dispense over 425,000 portions of food and beverage each year, are in an area which has no seating and where not more than ten persons may stand at one time. Plans are under way to improve this situation, recognizing that a convenient eating place for our out-patients and their parents is of utmost importance.

#### Plant Operations

During 1962, this Department was reorganized. The post of Engineer for Planning and Construction was established and Mr. Arthur W. Stomberg, our Plant Superintendent, was promoted to this position. Mr. Stomberg now has overall responsibility for maintenance and engineering, but will devote most of his time to assisting and advising the Medical and Administrative Staffs on the feasibility, design, and costs of proposed major renovations and new construction. It will be his function to interpret the need for new facilities, as expressed by the Hospital



## DIRECTOR OF GENERAL SERVICES

Staff, to the consulting architects and engineers. Insurance of adequate owner supervision of construction contracts will also be his responsibility.

Mr. George Stilgoe was employed to replace Mr. Stromberg as Plant Superintendent. Mr. Stilgoe has had extensive experience in construction and plant supervision since his graduation from M. I. T. in 1934. Mr. Stilgoe will continue the efforts of the Plant Operations Department to place major stress on preventive maintenance. This becomes most important as the machinery and equipment required to support modern medical care become increasingly complex.

Once again we may use the consumption of electric power as an approximate index of the increased activities and growth of the Institution. Our demand reached 1,450 kilowatts during June and July; this means that during at least one fifteen minute interval in those months we were using electricity at the rate of 1,450 kilowatts per hour. Because of this high usage it is necessary for us to purchase our electricity at 13,800 volts, requiring the installation of a new high voltage distribution system. It is anticipated that engineering studies will start shortly, coordinating this work with our overall building program.

An area in which this Department is always busy, and this year has been no exception, is planning and performing a variety of internal alterations reflecting the changing activities of the Hospital. A Service is enlarged, a function is added or dropped, an area is changed for added efficiency, all usually requiring some physical alterations, be it a complex partition or simple cabinet. All requested work is carefully studied to provide the most satisfactory results with the least overall cost to the Hospital. From previous experience in

doing similar work for others, the Plant Operations Department is frequently able to suggest improved methods, equipment, or work patterns. It is most rewarding, personally to the Department, and financially to the Hospital, to see an estimated \$1,500 approved cabinet work project installed at less than half cost simply by a careful study of the function in action. While all projects don't return such high dollar dividends, the same study is applied to all, often with substantial economies effected.

It would not be practical to list all of the projects undertaken this past year, but each was interesting and many had their problems, as those involved are well aware. The x-ray film processing area was remodeled, and a new automatic film processing machine added. While this Department did the work, Mr. Eric Hammond, of the Radiology Department, did the planning. A large house trailer was remodeled and set near the Personnel Department area, providing perhaps the least expensive office space, per square foot, that we have. The ground floor research laboratories in the House of the Good Samaritan were remodeled, and the construction problems were often unexpected. Remodeling work was done in the Cardiology Department, the Out-Patient Admitting area, and the Medical Records file area, among others. Following the start of our laundry processing by the Hospitals' Laundry Association, Inc., the upper floor of the laundry building was remodeled to include the sewing, uniform, and clean linen operations, while the Print Shop moved into the ground floor of the same building. A fire alarm system was installed in Building A, and the diner building on the Brookline Avenue parking lot was demolished. There were, of course, many other projects, but this list shows the

variety of our minor construction duties.

Planning and executing renovations and construction jobs may be the more exciting aspect of the Department's work, but there is another side more vital to the operation of the Hospital: the maintenance of the plant and equipment. Some of these operations were relatively spectacular, such as the removing and replacing of the brick corners of Gardner House. Most of the work is unsung, as it should be, its only measure of recognition being that if the work were not effective, everyone would sing out. The anonymity of our routine maintenance attests to its effectiveness, since a working hot water faucet causes no comment. Our system of painting patient areas on a pre-scheduled basis worked like a charm. An innovation in the area of routine maintenance should be mentioned whereby this Department has assigned personnel to work directly under the Housekeeping and Special Service Departments. Designed to decrease paper work, phone calls, etc., the results so far are quite gratifying.

### Housekeeping

On April 1, 1962, the Hospital appointed Mr. Lawrence Levinson as Manager of the Housekeeping Department. Mr. Levinson holds a B. S. degree in the physical and biological sciences from the University of Massachusetts. Since graduation, he has worked in the dairy industry as a production superintendent and as a plant superintendent.

The Hospital has indeed been fortunate to find a man who has both the experience and technical ability to manage this large Department. Perhaps even more important is the enthusiasm he directs toward raising the status of the housekeeping personnel and the standards of their work. His first report follows:

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

"It is axiomatic among administrators, hospital or otherwise, that effective work performance must be preceded by a well-designed Organization Chart. The Housekeeping Department, guided by consulting specialists, created such a chart early in 1962. It is a good one, refined and sharpened by comprehensive job descriptions. The efforts of the Department have been devoted since the spring of 1962 to translating this organizational guide into reality. This means, essentially, that properly oriented people must either be recruited or trained to fulfill the positions of supervision and leadership which the chart calls for. To satisfy our obligation in maintaining acceptable standards of environmental cleanliness, the organizational complement requires one hundred thirty people.

"It is appropriate to point out the broad scope of our responsibilities, both in respect to the physical layout of our buildings and in respect to the diverse functions which we perform. The half-million square feet of floors and the 2,600 offices, laboratories, patient rooms (with their related utility areas, nurses' stations, playrooms, and parents' rooms), libraries, clinics, lavatories, record and file rooms, service areas, residences, class rooms, x-ray and operating areas — all are scheduled for day-in, day-out care by Housekeeping personnel. Just a few representative figures will demonstrate the degree of activity that our center of operations, the Housekeeping Office, controls. We have 6,500 windows to be washed, draped and shaded. The daily distribution, marking, and repair of laundry and linen room items runs into the thousands. Waste for disposal from our various buildings accumulates to the volume of some 300 cubic yards a week. An important responsibility of our patient area personnel is the cleaning and decontamination of isola-

tion rooms in conformity with procedures established by the Nursing Department and the Committee on Infections. Finally, the establishment of new offices and the shifting of old ones demands availability of manpower to effect these moves.

"In order to maintain the organizational discipline necessary to fulfill this variety of functions — most of them simultaneously — it is obvious that personnel who are not recruited from the ranks of skilled workers must have the benefit of training, guidance, motivation and above all, supervision. In pursuit of this end, with the support of the Administration, a new approach to the training of supervisory personnel was introduced on July 1, 1962. The following description was released to vocational guidance counselors in local and some suburban high schools, as well as to employees of the Housekeeping Department, in April, 1962:

This program offered by The Children's Hospital Medical Center is designed to prepare high school graduates and other qualified applicants for career opportunities as supervisors in the rapidly expanding service function of hospital housekeeping sanitation. As hospital facilities across the nation continue to grow, the need for qualified, technically trained service supervisors grows simultaneously. The program is an integration of:

1. Classroom Instruction
2. Practical Project Instruction
3. Participation in Hospital Work Schedule
4. Actual Supervisory Experience

Trainees completing the pro-

gram will earn a certificate from The Children's Hospital Medical Center Supervisory Training Program in Housekeeping and Sanitation.

Selections were made and a group of sixteen trainees became the first class of its kind in The Children's Hospital.

"In addition to the learning of proper procedures for accomplishing assignments in cleaning, there was much more, it was felt, the trainees should be exposed to: for example, the bacteriological reasons for sanitation; the history of our Hospital, which will soon celebrate its one-hundredth year; the functions of the Medical Services in those areas much of our work is performed; a familiarity with the modern concept of work methods; the techniques of supervision with its overtones of motivating and influencing subordinates; and publications and periodicals dealing with hospitals and hospital services.

"The intention of designing the course in this way was to cultivate an attitude of pride in the Hospital and in the significance of their employment.

"The first quarter of the course (July, August and September) was successfully concluded with gratifying evidence that our efforts were already delivering results. Several appointments to lead positions in both the patient area and the building services have been made from among the class members. As we proceed to further strengthen our supervisory group, work methods will become a more prominent project; and on this will be based studies of increased mechanization, simplification, and greater efficiency."

### Linen Service

The year 1962 saw the first full twelve months of operation of the Hospitals Laundry Association, Inc. During the year, The Children's Hospital.



Medical Center sent 1,616,684 pounds of soiled linen to this central laundry. For this service, and including the additional service of starching and ironing thousands of uniforms, we paid \$133,292. This Hospital's linen makes up 17.6 per cent of the total load of the central laundry, making us a distant second to the Massachusetts General Hospital (53.6 per cent).

It has been noticed by The Children's Hospital Medical Center that the service provided by the central laundry has steadily improved during the year, and with active participation by Mr. Levinson, who serves on their Operating Advisory Committee, we expect further improvement. It is also anticipated that the cost to the Hospital for this service will continue to decrease during the coming year.

#### Print Shop

The Print Shop continues to grow and expand its services to this Hospital and, when possible, to affiliates and surrounding institutions. Mr. Salvatore Caliguri has served as Manager of this Department for nearly five years.

The Print Shop made cost transfers on charges to Hospital Departments and to other institutions of over \$50,000 during the year. These charges are computed on cost plus overhead basis and are constantly compared with the prices of outside printers. In most cases, the cost savings are significant, in addition to the speed and convenience of printing on the premises.

#### Special Services

The Special Services Department assumes the responsibility for security, locks and keys, grounds and landscaping, apartment house management, elevator operating, truck service, and the day-to-day operation of the parking

lots. Mr. George Nicoll manages this Department, and in addition handles details of the many parties and events that are held at the Hospital during the year. Many of these take place on our beautiful Prouty Terrace. This past year it provided a setting for the annual Christmas Tree lighting ceremony, the M.D.C. traveling zoo, the Recreation Department's patient art festival, the Children's Theatre and the Royal Canadian Navy Band, to mention a few.

Security in any large metropolitan medical center is a continuing responsibility. A thorough organization and cataloging of the locks and keys for the entire building has been completed. An outside security service is under contract to provide trained watchmen and guards on duty twenty-four hours each day.

The planned multilevel parking garage will be most welcomed and should provide relief of the overtaxed lots which were used by over 100,000 patients' parents and visitors during the year.

#### Communications

The end of 1962 marked the retirement of Mrs. Ruth O'Brien as Chief Operator after thirty-four years of outstanding service to The Children's Hospital. Mrs. O'Brien saw the Hospital's switchboard grow to the point of serving over 700 telephones within the Hospital and more than 45 outside lines. Twelve operators are required to provide twenty-four-hour coverage seven days per week.

Late in the year, the New England Telephone and Telegraph Company sent in a survey team to study our entire communications system. It is anticipated that during 1963 several important changes will be made to relieve the load on the operators and

improve the service. The variety of communication equipment that is available today is large and needs careful analysis by the prospective purchaser to assure the best service for the least cost.

#### Reception and Messenger Service

Mrs. Grace Bradley, as Senior Receptionist, again headed a group of twelve receptionists who staffed the four main entrance points of the Hospital. Their task of greeting and directing patients, parents, and visitors is a significant one which requires friendliness, understanding, patience, and a thorough knowledge of the Hospital.

The receptionist must receive and deliver, with the aid of a group of messengers, all of the flowers, gifts, telegrams, and registered mail which come in daily. In addition, she is responsible for the operation of an extensive intra-departmental messenger service.

#### Summary

It is probable that the most significant development affecting the general services area during the past year has been the installation of a comprehensive wage and salary program throughout the Hospital. The careful evaluation of all jobs will now make possible an equitable distribution of our payroll dollar. It will enable us to systematically prepare departmental budgets and to measure the operation of our departments against similar departments in other institutions.

The general services, with certain exceptions, can only reflect the activities and demands of the nursing and auxiliary departments which they must support. They do not initiate costs but merely attempt to provide the best service for the least cost.

1963 will find our new depart-



## REPORTS OF ADMINISTRATIVE DEPARTMENTS

ment heads more familiar with the Hospital and the wage and salary program will be in full effect. As a result we look forward to major improvements in our efforts to provide good service.

Rudman J. Ham

*Director of General Services*

## REPORT OF DIRECTOR OF NURSING

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The years 1961 and 1962 brought into sharper focus the effect of some of the recent changes in this Institution as it has grown in size and multiplied its activities. What some had not fully foreseen now became clear, namely, that the growth of the Institution had made obsolete many practices and procedures appropriate in the past. This has been as true in Nursing as in other Departments of the Hospital.

No Department is more affected than is Nursing by changes in Hospital organization and management since nurses are involved, directly or indirectly, in almost all Hospital activities. The relationship may not bear immediately upon the care of the patient as does, for example, food service or the work of the diagnostic departments, but may be more indirect like the activities of the Accounting, Maintenance, or Housekeeping Departments. In either case, what is done may alter or affect nursing activities.

Thus a decision to institute new charges to patients may require the Nursing Service to find and train a person to carry out this procedure on the Divisions; establishment of new laundry service or the development of new job responsibilities for the maids in the Housekeeping Department likewise may call for cooperation in planning between Nursing and the other Department involved.

Nursing, therefore, and particularly the administrative staff, has been seriously strained by the many studies and the developments in management which C. H. M. C. has undertaken in the past few years. New methods of cost accounting, budgeting and billing, the management survey, the establishment of a central laundry, the development of new personnel policies and the Wage and Salary Program, to mention only a few, have all required senior nursing staff to give much of their time to work which seems re-

more from the nursing care of patients. That the changes are desirable, and even essential, is recognized and it is obvious that many of them cannot be accomplished without nursing cooperation; indeed some that were overdue will correct problems about which the Nursing Department has long been concerned, so the opportunity to work for improvement has been welcome.

Much has been accomplished but much remains to be done. For the Nursing Service, this means continued effort to work with Hospital Administration and the various Departments while at the same time making needed improvements in the organization of the Service itself, which hopefully may provide patients with better care.

Among the improvements which are great cause for encouragement are the development of personnel policies and wage scales which give promise of reducing turnover of auxiliary personnel, a turnover which unquestionably has been a cause of inefficiency in operation and also of enormous expense. The Housekeeping Department has been making strides in reallocating responsibilities and assuming many of those formerly carried by nurses, and the development of the central laundry, while it has not been without its vicissitudes, will provide far better service than the old laundry; indeed much improvement has already taken place. An acute need exists for the Dietary Department of the Hospital to assume its correct role in patient food service. Happily, it appears that such a move is not far away.

Throughout the country, hospital administrators and nurses alike now recognize that it is imperative to realign responsibilities in hospitals so that nursing time is not spent on activities which others with different preparation can do better, or those with less preparation can do just as well. There are several reasons for

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

this conviction of which the overriding one is the shortage of registered nurses and licensed practical nurses for patient care. Another is a matter of hospital economics, it being less costly to assign simple housekeeping tasks to persons other than nurses and more efficient to engage properly prepared employees to do many jobs for which nurses are not prepared at all.

It is a paradox that the supply of nurses available to care for patients should be so inadequate at a time when the number of practicing nurses proportionate to the population and the numbers employed in hospitals are both greater than in an earlier day when the need seemed less acute. The reasons are not far to seek: multiplicity of therapeutic measures and the rapid patient turnover, the more complex hospital structure and new demands upon nurses, the movement of nurses from job to job or job to marriage, changes in nursing education which reduce student service, shorter working hours for all, the gradual acquisition by nurses of responsibility for many procedures formerly not done or formerly done by doctors. All these and many more have contributed to increase in demand for nursing services. That the demand will decline in the future or the supply increase seems unlikely. It is, therefore, all the more important that nursing time be used to the best advantage.

As one looks at the development of hospitals, a striking feature is the degree to which nursing service was responsible for much of the management of household services as well as for the nursing care of patients. Gradually separate departments for these various services have developed but in many ways it has been difficult to change the pattern of nurse responsibility, partly because administrators and doctors did not distinguish between nursing care and the so-called "hotel-type" functions

associated with patient hospitalization. Part has been the fault of nurses themselves who have been equally confused and perhaps also somewhat reluctant to relinquish any responsibilities. As a consequence the relationship of the nurse to the hospital as a whole has been quite different from that of the physician who comes to see and treat his patient, leaving responsibility for the environmental factors to others.

To see all this is easier than to change it, for hospitals that have been running a long time are steeped in tradition and, perhaps most important, the pace of development of new therapeutic measures is such as to keep people so busy that little time is left for planning or for putting necessary changes into effect. The great variety of people who must come together to bring about change in procedure on a hospital-wide basis is always considerable and their meeting difficult to arrange.

If one can imagine a setting in which nurses do not have to think about the provision of hotel-type services for patients and give their full attention to the nursing of patients and assisting of doctors with therapy, then one has a good objective for the future. Some places in the country have accomplished much toward such a goal but it is not easily done.

At the time one tries to reallocate jobs and make organizational changes it is necessary to think through carefully what the effect of such changes may be, lest in curing one problem a worse be created. With the many departments and people involved in hospitals there is always the danger that the care of the patient will be fragmented with no one person able to see all that happens to him. As one therefore takes away from the head nurse the many years' accretion of job responsibilities, it is necessary to avoid chipping away her authority

as well, for she is the individual most strategically placed to coordinate the activities of the various groups who serve the patient. She can do a far better job if more of her time is devoted to the patient rather than to ancillary matters, provided she retains enough authority to act in the best interest of the patient as the agent of the physician who has established the plan of care. This authority can only be derived from agreement among medical staff, hospital administration, and nursing upon what is desired for the patient and what the role of the head nurse should be.

The word "communications" has been nearly worn out of late, but that people feel the need to mention it so often does point to changes in our society which make it necessary for us to tell each other what used to be understood without being said. This is just as true in a hospital as in any other institution; indeed, hospitals may be a prime example of the need for good communications. Such a need has always existed, but it never was as acute as it is today when hospital people are in danger of diminishing the value of the work they do because of their inability to find ways to plan and work together in the interest of the patient. All Departments are involved, but Medicine, Administration, and Nursing have the greatest responsibility to provide solutions; failure to do so may be tragic in its results.

Muriel B. Vesey, R.N.  
*Director of Nursing*



## DIRECTOR OF NURSING

## Nursing Service Staff

September 30, 1962

Registered Nurses	170
Licensed Practical Nurses	31
Aides and Orderlies	97
Ward Managers	1
Clerical (Divisions)	22
Secretarial	1½
Total	322½

*Budget*

211
49
109
2
21
2
<hr/> 394

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

### REPORT OF DIRECTOR, SCHOOL OF NURSING

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This report for the years 1961 and 1962 must record a sad event which dominated the latter year: the death in January 1962 of Miss Theresa Hurley, Associate Director of the School of Nursing. Miss Hurley had held this key position for fourteen years and bore a major responsibility for the School's various programs. The contribution she made was recognized in resolutions adopted by the Executive Committee of the Board of Trustees, and by the Alumnae Association of the School of Nursing at its annual meeting.

A memorial to Miss Hurley, The Theresa A. Hurley Memorial Library Fund, was established for the purchase of books for the School of Nursing Library. Many alumnae of the School wished to remember Miss Hurley in this way or by contributing to the scholarship fund of the Alumnae Association. The library has just purchased, with part of these funds, the most recent edition of the *Encyclopedia Britannica*.

In May of 1962, Miss Ethel Trafton, a graduate of The Children's Hospital School of Nursing, holding the master's degree from Boston University School of Nursing, was appointed Associate Director. Miss Trafton has held significant posts, both in the Nursing Service and on the faculty of the School and has exceptional qualifications for her new responsibilities.

In the fall of 1961, the planning for the Harvard Affiliated Hospitals quite naturally led to a consideration of the feasibility and desirability of a centralized plan for nursing education and nursing services. Discussions begun at that time have continued throughout the subsequent year.

Early in 1962 the committee recommended the development of programs in nursing education, under the

aegis of a university, to be of different lengths, preparing nurses with varying degrees of knowledge and skill, and allowing for progression from one program to another. Such a school would utilize the clinical facilities of the hospitals associated with Harvard Medical School and might eventually replace the schools now under control of these hospitals. Since the parent committee has accepted the nursing committee's report, study of ways to develop such a plan continues.

The last few years have seen many changes in nursing education, some of which have pointed to its eventual movement out of hospitals and into such educational institutions as junior and senior colleges and universities. As far back as 1948, the profession went on record as favoring such a development.

Aside from the reasons which prompted the nursing profession to favor collegiate education for professional nurses, hospitals also have been interested in this trend because of the increasing expense which programs of nursing education have entailed, expense frequently reflected in charges to patients, and because the burden of preparing the majority of nurses for all nursing services in the country has fallen upon a relatively small number of hospitals, most of them voluntary. With patient care costs rising it has been natural for boards of trustees to question the wisdom of continuing schools. But the decision to close is a difficult one since there exists the fear that the present short supply of registered nurses, of whom approximately eighty per cent are educated in hospitals schools, will be further reduced. At present, collegiate schools of nursing are not numerous enough to fill the gap. In spite of these deterrents the number of hospital schools declined from 1,190 in 1950 to 856 in 1960;

## DIRECTOR, SCHOOL OF NURSING

this decline has accelerated in recent years with the establishment of schools in both junior and senior colleges. Should the public school system be extended through the fourteenth year it is likely that two-year programs in nursing would be developed rather rapidly in New England.

Under these circumstances, interest in the actual costs of nursing education has become more intense. Among efforts to determine these has been a study under the auspices of the National League for Nursing begun in 1959 in which The Children's Hospital School of Nursing was included. The study showed that the total school cost, for the fiscal year 1960, was \$613,021.00 of which \$199,452.00 were direct costs and \$413,569.00 indirect, including the cost of maintaining students. Of the total, \$258,652.00 is attributable to The Children's Hospital program; the balance is the cost of offering other programs in nursing of children.

The annual average cost to The Children's Hospital Medical Center for a student was therefore \$2,463.35. Cash income from tuition and fees together with the estimated value of the students' services incidental to learning to care for patients, is estimated to offset the expense by \$752.55 leaving a deficit per student of \$1,710.80.

Increases in charges were instituted in September 1962 bringing to approximately \$1,100.00 the fees paid by students in three years. It appears probable that further increases will be necessary in the near future.

Affiliating schools, which send students here for instruction and experience in pediatric nursing, have been warned of a tuition charge to be instituted soon to offset in part a loss estimated at \$180.00 per student in 1959-60. Since the School receives between five and six hundred such stu-

dents a year it is evident that the loss sustained in offering this program is a very sizeable one.

As might be anticipated, the increase in charges to students has resulted in more frequent requests for financial assistance, which heretofore had been relatively few. Funds made available by the Women's Committee and by the Alumnae Association of the School of Nursing thus far have been adequate to meet the most pressing needs; in the future it is likely that further sources of such funds may have to be sought. In the last two years students received \$1,200.00 from the Stella Goostray Scholarship Fund of the Alumnae Association of the School of Nursing and \$1,975.00 from the Hospital scholarship fund which also is authorized to give tuition scholarships to registered nurses on the staff.

The School continues to receive approximately two hundred applications and to accept forty-eight candidates annually; the opportunity for selection of well-qualified candidates is therefore good. The Admissions Committee voted in 1962 to require that candidates present the scores of the scholastic aptitude test of the College Entrance Examination Board as an additional measure of suitability for entrance to the course.

Academic aptitude is by no means the only criterion for selection of students, but it is necessary that every effort be made to enroll those who can

carry the course successfully; while scholastic ability does not ensure success in nursing, a reasonable degree of such ability is nevertheless sine qua non for an acceptable candidate. That selection has been satisfactory in this respect is evidenced by results of State Board Examinations in which the classes of 1960 and 1961 showed excellent standing with no failures and with average scores exceeding national means by a considerable margin. These results are given below.

In 1961, the graduates of this School attained an average score in nursing of children equalling the highest attained by any school in Massachusetts, either hospital or college.

Knowledge and ability to pass examinations are not the only consideration in evaluating nurses. Skills and attitudes are equally important, if much harder to measure. In this coming year we hope to obtain information regarding the success on the job of recent graduates of this School, which is after all the real test.

That selection is far from perfect however is evident in withdrawal rates. While they usually have been well below the national average, which is 33% for schools of nursing, there are times when the rates of withdrawal are much higher than one could wish. Obviously some individuals are accepted who find they are not suited to nursing or who, in the faculty's judgment, do not demonstrate satisfactory

## Class of 1960 (32 members)

	Medical Nursing	Surgical Nursing	Obstetrical Nursing	Pediatric Nursing	Psychiatric Nursing
Average Scores . . . . .	579.6	556.2	565.9	599.4	555.5
National Mean Score . .	542	518	528.5	519.4	538.2

## Class of 1961 (34 members)

Average Scores . . . . .	573	559.9	560.7	627.4	555.6
National Mean Scores . .	517.7	517.3	513.2	512.2	522.2



## REPORTS OF ADMINISTRATIVE DEPARTMENTS

ability, whatever their capacity to pass the courses may be. In the two years, 1961 and 1962, the School graduated 66 candidates of a total intake for the two classes of 93, a 29% withdrawal. In the nine years, 1952-60, the average withdrawal rate was 17.9%.

One internal change in the program which has made for more effective instruction and guidance is the employment of two instructors who spend all their time in the Peter Bent Brigham Hospital with the students from this School. These nurses are regular faculty members of The Children's Hospital School of Nursing but aside from participation in faculty activities are attached to the Brigham at all times.

At the close of 1962, seventeen schools of nursing are sending students for the regular affiliation in nursing of children. During the preceding two years the Salem Hospital School of Nursing discontinued its affiliation, substituting experiences at the new North Shore Babies and Children's Hospital, and the Massachusetts Memorial Hospitals School of Nursing closed.

Students are received also from two college schools, the Radcliffe-Massachusetts General Hospital Coordinated Program and Simmons College School of Nursing. The Hospital provides facilities for these students but is not responsible for their program of instruction. In 1962, Boston College transferred its students to another institution.

The School of Nursing also takes responsibility for instruction and clinical experience for practical nursing students from the Holy Ghost Hospital School of Practical Nursing and from the Boston Trade School. At the close of the year arrangements are being made to receive students from the Shepard-Gill School of Practical Nursing, formerly the Household Nursing Association. It is appropriate that The

Children's Hospital should have a part in the preparation of students from this school which bears the names of two Children's Hospital graduates, the late Mrs. Katherine Shepard Dodge and the late Miss Helen Gill.

The large numbers of students for which the School is responsible present both faculty and Hospital staff with many problems. Qualified faculty members are in short supply so that often it is not possible to find experienced instructors to fill all the positions. Even with full staff the work load of faculty members in this institution is very heavy; when vacancies occur or positions are filled by inexperienced teachers the additional tasks become truly arduous. The School has cause to be grateful for the devoted work of the faculty group. Gratitude is due also to a number who left the staff in the past two years, among whom special mention should be made of Miss Ruth Lumbra, a faculty member for many years, who resigned in 1961. Miss Lumbra's interest in the students and in the School were notable as was her ability as a teacher.

The greatest need in the School is for more and better prepared faculty, but the lack felt here is far from unique; nurses properly qualified to teach are in short supply throughout the country. Recent improvements in personnel policies are helpful in recruitment and most encouraging. There remains, however, concern about a retirement plan as many of the more permanent teachers are acutely conscious of this need. These are the teachers who may be qualified for university teaching posts where policies offer much more security. Also desirable would be a plan for sabbatical leave for faculty.

Equipment is of less importance than people, nevertheless good equipment helps staff to teach more effec-

tively. Projection and recording equipment are among the items the School needs. Air conditioning of a classroom might appear to be a luxury, but in the case of the main lecture room in Gardner House it now seems to be almost a necessity. This small room is filled when affiliate classes are of normal size and in the summer the heat is troubling; more serious however is the increasing noise, especially from aircraft, so that in summer when windows are open, instructors may be interrupted several times during a lecture.

Finally, teaching and office space, especially in the Hospital, is limited and real difficulties ensue at times, but these are problems common to all departments, so the School can but accept the inconvenience philosophically and look forward to improvements in the future.

Muriel B. Vesey,  
*Director, School of Nursing.*

## DIRECTOR, SCHOOL OF NURSING

## EXHIBIT A

*School of Nursing Statistics*

Students Enrolled	
October 1, 1960	112
September 30, 1962	125
Students Admitted	94
Re-admitted	8
Graduated	63
Resigned	22
Off Roll Temporarily	4
Affiliating Students Enrolled	
October 1, 1960	131
September 30, 1962	121
Entered 1960-61	512
1961-62	582

## EXHIBIT B

## SCHOOLS AFFILIATING

## AT CLOSE OF 1962

New England Deaconess Hospital  
 School of Nursing  
 Eastern Maine General Hospital School  
 of Nursing  
 Beverly Hospital School of Nursing  
 Peter Bent Brigham Hospital School of  
 Nursing  
 Worcester-Hahnemann Hospital  
 School of Nursing  
 Quincy City Hospital School of Nurs-  
 ing  
 Truesdale Hospital School of Nursing  
 McLean Hospital School of Nursing  
 New England Baptist Hospital School  
 of Nursing  
 The Faulkner Hospital School of Nurs-  
 ing  
 Newton-Wellesley Hospital School of  
 Nursing  
 Concord Hospital School of Nursing  
 Mary Hitchcock Memorial Hospital  
 School of Nursing  
 Melrose-Wakefield Hospital School of  
 Nursing  
 Beth Israel Hospital School of Nursing  
 Leominster Hospital School of Nursing  
 Lasell Junior College

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

### REPORT OF DIRECTOR OF PERSONNEL

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During the period covered by this report, the Personnel Department has made noticeable progress in the field of personnel administration and employee relations.

Significant and constructive progress has been made in the development of a salary administration program. With the assistance of a consultant from Industrial Relations Counselors Service of New York City a formal program for administering Hospital personnel salaries on a systematic and equitable basis has been almost completed. Up to the present, salaries have been based partially on emotion and whim, and consequently have been the source of much employee dissatisfaction. I am confident that the new program, when formally established, will do much to eliminate the existing inequities and contribute materially to management effectiveness in a number of ways, including: analyzing the soundness of the Organization's structure; developing an understanding and appreciation of the aims and needs of each Department; facilitating communication between the employee and his supervisor; providing a basis for the selection and placement of personnel; and assisting management and individuals to control the efforts of the Organization to insure a coordinated, mutually satisfactory operation.

I am extremely pleased to report that the Executive Committee of the Board of Trustees voted to pay the entire cost of an employee's individual Blue Cross premium. In dollars and cents this means that The Children's Hospital Medical Center will bear about sixty per cent of the individual's Blue Cross-Blue Shield premium. This is the first Hospital-paid benefit that we have been able to offer, and I am confident that, as our financial condition improves, additional benefits will be provided.

Employee turnover at the Hospital continues at a disheartening rate: about 72 per cent on an annual basis. The following Departments show the highest rate of instability: Housekeeping, 110 per cent; Medical Records, 92 per cent; and Nursing, 80 per cent. During the past year we have hired 950 new employees, and further scrutiny shows that about 3,000 applicants were interviewed to secure these 950. Departures from the Nursing Service are a constant source of anxiety, even though our Nursing pay scale is among the best in the Boston area. The fact is that the gypsy trait of professional nurses seems to be pandemic. Low salaries account for the high turnover in the other two areas.

In the general area of personnel administration, policies and procedures have been established and published covering vacations, sick leave, overtime, holidays, and terminal pay. It is notable that our "Sick Leave" policy permits accumulation of sick days at the rate of one day per month up to a maximum of 180 days. A minimum wage of \$1.20 per hour was established, effective October 1, 1962.

Other activities carried out by the Personnel Department relate to services for employees. The Summer Festival was held late in June, with over 500 employees participating, and was generally considered a smashing success. The Service Award Ceremony, honoring employees with five or more years at The Children's Hospital Medical Center, took place in May with Mr. Wolbach presenting certificates to the most senior employees. The annual Christmas Party was held on December 13th, with the majority of employees participating in the festivities.

A good deal of progress has been accomplished over the past year, yet much remains to be done in the area of personnel administration which, of course, contributes to our common goal of better child care.

Alexander T. Brown  
*Director of Personnel*



### REPORT OF DIRECTOR, VOLUNTEER SERVICE

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"Good is done by degrees. To do the small, the modest thing which lies before us, to realize the spiritual irrevocability of our smallest acts, this is to be useful, and the useful and the beautiful are rarely, if ever separated." (Francis J. Braceland, M.D., Sc.D., in an address presented at the 1959 meeting of the American Hospital Association.) Our "useful" and "beautiful" volunteers donated 50,065 hours of service in what Albert Schweitzer terms "careers of the spirit."

The Recreation program, which now provides service from 9:00 a.m. through 8:00 p.m., is staffed by people ranging in age from sixteen to "over sixty"; by students who apply as individuals and those who are referred to us by State Teachers College, Wheelock College, and Boston Latin School; by business girls; and by an increasing number of male students and business men.

The Recreation Department has shown dramatic growth in hours of service to the patients. Such growth is attributable to several factors. The increased staff of the Recreation Department, and their interest in training and supporting the volunteers, has resulted in an esprit de corps that has done much to eliminate "drop-outs" and absenteeism. As each recreation teacher is familiar with the patients on her floor, the volunteers are directed to those patients who have the greatest need for their services. This intelligent direction has increased the volunteers' feeling of accomplishment and of genuinely being needed.

A summer evening recreation program was pioneered in 1961 hopefully, but dubiously, since it was feared that the volunteers would not persevere during the sultry nights. The Recreation Coordinator and I were firmly convinced that the patients' needs for such a program were so great that it would succeed, and to substan-

tiate our conviction, worked at night to assist with supervision. I have seldom had more genuine fun, nor crawled home more completely exhausted, than on the nights when, assisted by members of the Phillips Brooks Club of Trinity Church, we provided weekly cook-outs for the patients at the House of the Good Samaritan. All the patients in the Respirator Unit were brought out onto the first floor porch, where the hamburgers and hot dogs sizzled on a recalcitrant charcoal broiler. The patients on Divisions 72, 73, and 74 who, for medical reasons, are not permitted to mingle with the respirator patients, peered through the upper porch railing like a group of hungry nestlings, impatiently awaiting their dinners, which were rushed up over the stairs by the volunteers. Visualize, if you will, the Babel of cries for rare! medium! well done! mustard! piccalilli! ketchup! etc. etc.

As always, the bulk of the summer volunteers are high school and college students. During the summer of 1962, seventy-three young girls and eleven boys worked in excess of 8,000 hours. Twenty-six of them were awarded the American Hospital Association 100-hour pin. Every Hospital Department which is serviced by volunteers, with the exception of the Nurses Aide Service, utilized the teenagers. I cannot speak too highly of these fine young people, of their seriousness of purpose, their application to their assigned tasks, and of the Staff's appreciation of their work. The fifty-eight schools they attended, as far west as Ohio, as far south as New Orleans, as far north as Canada, and as far east as Switzerland, were each notified of their students' summer activities. Not only does the Hospital receive their services, but the public relations potential from such a group,

## REPORTS OF ADMINISTRATIVE DEPARTMENTS

many of whom have written to me expressing their gratitude for being given the opportunity to be useful, is tremendous. Their parents are not insensitive to the fact that many have received invaluable career guidance just by being in the Hospital, or from the many Staff members who found the time to talk at length with them. They too have expressed their appreciation, via mail and verbally.

The Volunteer Service Committee has continued to provide assistance to this Department. The spring parties to honor volunteers, planned and organized by the committee under the able chairmanship of Mrs. Robert B. Almy, were very successful means of expressing the Hospital's gratitude to the volunteers. Dr. Stewart Clifford spoke concerning maternal and child health in Russia at the 1961 party, and Dr. William F. Bernhard told of the recent advances in heart surgery at the 1962 party. It is interesting to note the increasing number of the volunteers' husbands who attend the parties to avail themselves of the opportunity to hear our eminent doctors tell of their work. At the spring 1962 meeting, the committee recommended the purchase of candy stripe pinafores for the teen-age girls and suggested that a jacket for male volunteers be substituted for the armband previously worn. Administration approved the request and while delivery date was despairingly and constantly mañana, by mid-summer they were finally delivered. In their new garb the young people presented a much more professional and attractive appearance.

The Patient Intramural Transportation team has been able to increase its service by extending its time on duty to 4:00 p.m. during the summer, and by instituting a Saturday Morning Service which is staffed by students from The Beaver Country Day School.

The recruiting, screening of applicants, and assignments are handled at the school, by a student chairman under the direction of the Head of the Senior School, as a means of providing the students with an opportunity for community service. The House in The Pines, in Norton, Massachusetts, provides two students each Monday who work with the Transportation

team. The girls are driven to and from the Hospital by the school station wagon.

A new Volunteer Service group has completed cataloguing Dr. Jane-way's Library in the Laboratory Study Building, and with the cooperation of the Harvard Medical School Library, missing volumes were obtained. Those missing issues which were not ob-

October 1, 1960 through September 30, 1961

SERVICES	Present Year		Previous Year	
	Hours	Volunteers	Hours	Volunteers
Administrative Aides	1,529½		1,346	
Admitting Hostesses	1,359		1,421¾	
Blood Bank	213½		348¾	
Clinics	3,097½		2,781¼	
Feeding	1,210½		1,044¾	
Gift Shop	6,663		6,894½	
Good Samaritan	3,366½		3,317¾	
Information Desk	321½		420½	
Laboratory	1,263¾		1,329¾	
Library, Patient	1,190¾		1,031	
Lunch Shop	7,707		7,847	
Medical Library	529¾		—	
Parents Teas	180¼		216½	
Photography	157½		162	
Plaster Room	336¾		575¼	
Post Office	207¼		183½	
Recreation:	5,901¼		3,030½	
Day	2,292¼			
Evening	1,322¼			
O.P.D.	953			
Red Cross A&S	145½			
Div. 28	1,178			
Red Cross Aides	722¼		799	
Surgical Dressings	595		953½	
Transportation	4,693¼		4,993¼	
Volunteer Aides	2,406¼		1,964½	
X-Ray	255¾		329¾	
Xmas Decorations	116		75½	
Public Information	45½		—	
Print Shop	5		—	
Social Service	—		68½	
Mended Hearts	—		1½	
Medical Records	—		134½	
Totals	44,380	724	41,282¼	677
New Volunteers				

## DIRECTOR, VOLUNTEER SERVICE

tainable at the Harvard Library were ordered from the publisher. Now that the massive cataloging has been completed, the volunteers service the library once a week. The same group just recently catalogued the small Social Service Library.

The Women's Committee has

provided the funds and the decorator to renovate the drab Volunteer Office. Mrs. Kirke Neal's plans have become a welcome reality. I am more than grateful to the Committee for so generously providing an attractive area for us to work in. Administration has made available a generous closet to re-

place the inadequate clothes closet in the Volunteer Office.

The Coffee Shop closed its doors the first of August for reconstruction, necessitated by the addition of a Doctors' Dining Room to the present cafeteria. The many inquiries from personnel and parents relating to the re-

## ANNUAL REPORT

## THE CHILDREN'S HOSPITAL MEDICAL CENTER—VOLUNTEER SERVICE

October 1, 1961 through September 30, 1962

SERVICES	Present Year		Previous Year	
	Hours	Volunteers	Hours	Volunteers
Administrative Aides	1,792		1,529½	
Admitting Hostesses	1,404½		1,359	
Blood Bank	531		213½	
Clinics	2,684½		3,097½	
Feeding	308½		1,210½	
Gift Shop	6,448		6,663	
Good Samaritan Clinic*	237½		3,366½	
Information Desk	299½		321½	
Laboratory	794½		1,263¾	
Library, Patient	1,618¾		1,190¾	
Lunch Shop	6,764¼		7,707	
Medical Library	541¼		529¾	
Parents Teas	225		180¼	
Photography	199		157½	
Plaster Room	359		336¾	
Post Office	191		207¼	
Recreation:	15,592¾			
Day	7,853½	Day	2,292¼	
Evening	6,435¼	Evening	1,322¼	
O. P. D.	559¼	O. P. D.	953	
Red Cross A&S	346	Red Cross A&S	145½	
Div. 28	398¾	Div. 28	1,178	
Red Cross Aides	797½		722¼	
Surgical Dressings	650¼		595	
Transportation	5,246¼		4,693¼	
Volunteer Aides	2,730¼		2,406¼	
X-Ray	355		255¾	
Public Information	28½		45½	
Xmas Decorations	149½		116	
Print Shop	97¾		5	
Mended Hearts	19¾		—	
Totals	50,065		44,380	
Volunteers		786		724

\*Good Samaritan figure of 1960-61 includes those of the Recreation Service which are now tallied with hospital Recreation hours.



## REPORTS OF ADMINISTRATIVE DEPARTMENTS

opening, and the long queues at the cafeteria door at the coffee hour and lunch period indicated the tremendous service supplied by the Coffee Shop under its Chairman, Mrs. Samuel Stevens, and her faithful teams. The Gift Shop, while continuing to remain open during the construction period, experienced a diminishing trade, as the Coffee Shop customer is often a Gift Shop browser. Now that it is "back in business," the Coffee Shop is once again providing a both warm and friendly place for parents and Hospital personnel to relax, and a considerable amount of funds for the Hospital.

The Surgical Dressings Group, which has worked in seven different locations during its twenty years of existence, is to have its work area changed again. Despite its nomadic existence, it has made 201,669 dressings this year. The Chairman, Mrs. Joel Barnes, supplies material, trains workers, and collects the finished dressings from four church groups. Mrs. W. Harry Slade, who is Mrs. Barnes' daughter, formed a Surgical Dressings group in Duxbury, which has grown too large to continue to do its work in her home. The group presently meets bi-monthly at "Sunlight House," an institution for the blind, in Egypt, Massachusetts. Mrs. Barnes and Mrs. Blake are one of our many mother-daughter teams who carry on the tradition of service through succeeding generations.

During 1961, the Patient's Library circulated 3,579 books. This is the largest circulation since records have been kept (1956). Mrs. Kenneth Warren, Chairman, and the Library Volunteers have assisted with the organization of patient libraries in the Children's Heart Hospital, Philadelphia, Pennsylvania, and in the Children's Hospital, Athens, Greece. In addition to the 2,539 books printed in

English, the library has 272 books printed in twenty-five foreign languages ranging from Icelandic to Gujarati. Excess books are donated to the Ranfurly Out-Island Libraries in the Bahamas.

I assisted Mrs. Anthony Michaels, the Fund Director, at the spring Trustees Luncheons, and spoke at several churches and at the Massachusetts State Federation of Women's Clubs' Hospital Committee. The Hospital Committee donated three Mistogen Units to Dr. Harry Shwachman's Department, and the donations of money received from the various church groups were used to purchase washable slippers for the patients at the House of the Good Samaritan.

The attached statistical report indicates that there are twenty-six categories of Volunteer Services. Each category contains people and services worthy of a separate report, but as space does not permit, I will not attempt at this time to cover them all. I would like to note that Mrs. Richard Ginsberg, one of our volunteers, patiently computes and posts each volunteer's monthly statistical record, and compiles a monthly and an annual statistical report. To her, a fervent thank you.

I would like to again express my deep appreciation to Administration, Staff and to the Women's Committee for their continued support and assistance, and to the volunteers who make this report necessary and possible.

Mrs. Kathleen Higgins  
*Director, Volunteer Services*



# THE CHILDREN'S HOSPITAL MEDICAL CENTER

